

FILE 'HOME' ENTERED AT 17:09:55 ON 28 FEB 2008

=> file registry  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 17:10:08 ON 28 FEB 2008  
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STRUCTURE FILE UPDATES: 27 FEB 2008 HIGHEST RN 1005551-32-5  
DICTIONARY FILE UPDATES: 27 FEB 2008 HIGHEST RN 1005551-32-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> exp chitobiose/cn

E1	1	CHITOBIIITOL/CN
E2	1	CHITOBIOHYDROLASE/CN
E3	1 -->	CHITOBIOSE/CN
E4	1	CHITOBIOSE 6-O-SULFOTRANSFERASE/CN
E5	1	CHITOBIOSE DIACETATE/CN
E6	1	CHITOBIOSE OCTAACETATE/CN
E7	1	CHITOBIOSE PHOSPHORYLASE/CN
E8	1	CHITOBIOSE, N,N'-DIACETYL-/CN
E9	1	CHITOBIOSE-AZELAIC ACID COPOLYMER/CN
E10	1	CHITOBIOSE-AZELAOYL CHLORIDE COPOLYMER/CN
E11	1	CHITOBIOSE-DECANEDIOIC ACID COPOLYMER/CN
E12	1	CHITOBIOSE-PENTADECANEDIOIC ACID COPOLYMER/CN

=> s E3

L1 1 CHITOBIOSE/CN

=> exp chitotriose/cn

E1	1	CHITOTRIITOL/CN
E2	1	CHITOTRIITOL, TRI-N-ACETYL-/CN
E3	1 -->	CHITOTRIOSE/CN
E4	1	CHITOTRIOSE UNDECAACETATE/CN
E5	1	CHITOTRIOSE, N,N',N''-TRIACETYL-/CN
E6	1	CHITOTRIOSE, TRI-N-ACETYL-/CN
E7	1	CHITOTRIOSE, TRI-N-ACETYL-, OCTAACETATE/CN
E8	1	CHITOTRIOSE-1,1',1''-3H3/CN
E9	1	CHITOTRIOSE-DODECAMETHYLENE DIISOCYANATE-EICOSANEDIOIC ACID COPOLYMER/CN
E10	1	CHITOTRIOSE-DODECANEDIOIC ACID COPOLYMER/CN

E11 1 CHITOTRIOSE-EICOSANEDIOIC ACID COPOLYMER/CN  
 E12 1 CHITOTRIOSE-OCTANEDIOIC ACID COPOLYMER/CN

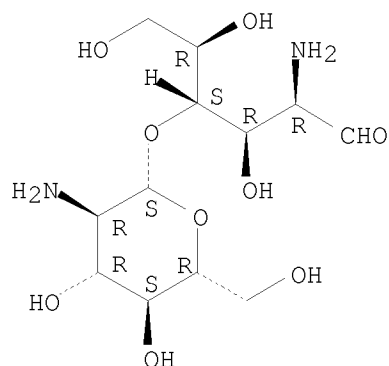
=> s E3

L2 1 CHITOTRIOSE/CN

=> d l1 scan

L1 1 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN D-Glucose, 2-amino-4-O-(2-amino-2-deoxy- $\beta$ -D-glucopyranosyl)-2-deoxy-  
 MF C12 H24 N2 O9  
 CI COM

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> exp diacetylglucosamine

E1 1 DIACETYLGLUCOPYRANOS/BI  
 E2 1 DIACETYLGLUCOPYRANOSYL/BI  
 E3 0 --> DIACETYLGLUCOSAMINE/BI  
 E4 1 DIACETYLGLUTAM/BI  
 E5 1 DIACETYLGLUTAMIC/BI  
 E6 10 DIACETYLGLUTAR/BI  
 E7 1 DIACETYLGLUTARAMIDE/BI  
 E8 2 DIACETYLGLUTARATE/BI  
 E9 1 DIACETYLGLUTARIC/BI  
 E10 1 DIACETYLGLUTARO/BI  
 E11 1 DIACETYLGLUTAROYL/BI  
 E12 6 DIACETYLGLUTARYL/BI

=> exp diacetylglucosamine/cn

E1 1 DIACETYLGITOXIN/CN  
 E2 1 DIACETYLGITOXIN  $\Gamma$ /CN  
 E3 0 --> DIACETYLGLUCOSAMINE/CN  
 E4 1 DIACETYLGlycerol/CN  
 E5 1 DIACETYLGOMISIN J/CN  
 E6 1 DIACETYLGRACILIFORMIN/CN  
 E7 1 DIACETYLGUAIACIN/CN  
 E8 1 DIACETYLGUANIDINE/CN

E9	1	DIACETYLGUGGULSTEROL Y/CN
E10	1	DIACETYLHAMACANTHIN A/CN
E11	1	DIACETYLHAMACANTHIN B/CN
E12	1	DIACETYLHEDERAGENIN/CN

=> exp N,N'-diacetylglucosamine/cn  
 MISMATCHED QUOTE IN EXPAND TERM  
 Quotation marks (or apostrophes) must be used in pairs,  
 one before and one after the expression you are setting  
 off or masking.

=> exp N,N-diacetylglucosamine/cn

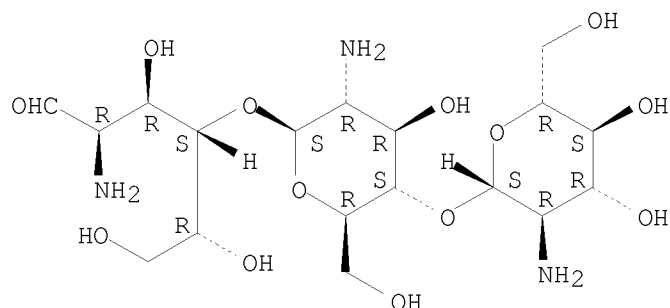
E1	1	N,N-DIACETYLDEOXONEOONCINOTINE/CN
E2	1	N,N-DIACETYLDEOXOONCINOTINE/CN
E3	0 -->	N,N-DIACETYLGLUCOSAMINE/CN
E4	1	N,N-DIACETYLGLUTAMIC ACID/CN
E5	1	N,N-DIACETYLHYDRAZINE/CN
E6	1	N,N-DIACETYLMALONYL DIHYDRAZIDE/CN
E7	1	N,N-DIACETYLNONANOIC ACID AMIDE/CN
E8	1	N,N-DIACETYLNORLOLINE/CN
E9	1	N,N-DIACETYLNORLOLINE PICRATE/CN
E10	1	N,N-DIACETYLSOLACASINE/CN
E11	1	N,N-DIACETYLTYRAMINE/CN
E12	1	N,N-DIALLYL A-(O-METHYLPHENOXY) PROPIONAMIDE/CN

=> s l2 scan  
 MISSING OPERATOR

=> d l2 scan

L2 1 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN D-Glucose, O-2-amino-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-2-  
 amino-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-2-amino-2-deoxy-  
 MF C18 H35 N3 O13  
 CI COM

Absolute stereochemistry.



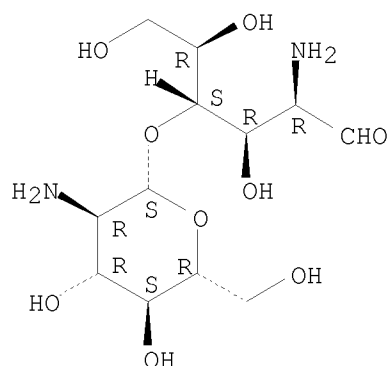
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 577-76-4 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN D-Glucose, 2-amino-4-O-(2-amino-2-deoxy- $\beta$ -D-glucopyranosyl)-2-deoxy-  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Chitobiose (7CI)  
 OTHER NAMES:  
 CN 4-O-(2-Amino-2-deoxy- $\beta$ -D-glucosyl)-D-glucosamine  
 FS STEREOSEARCH  
 DR 23327-39-1, 140849-41-8, 68232-34-8, 196503-39-6  
 MF C12 H24 N2 O9  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS,  
 CASREACT, CHEMCATS, CSCHEM, MEDLINE, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

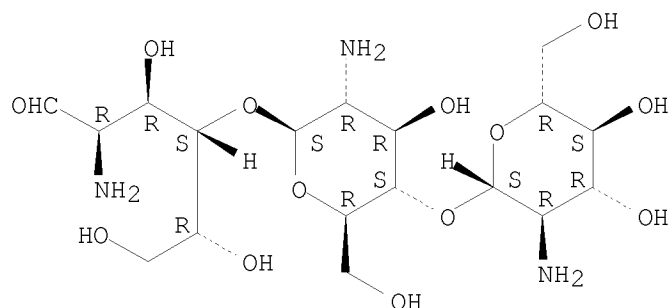
270 REFERENCES IN FILE CA (1907 TO DATE)  
 36 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 272 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d 12

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 41708-93-4 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN D-Glucose, O-2-amino-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-2-  
 amino-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-2-amino-2-deoxy- (CA  
 INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Chitotriose (7CI, 8CI)  
 AR 4207-52-7  
 FS STEREOSEARCH  
 DR 23327-40-4  
 MF C18 H35 N3 O13  
 CI COM

LC STN Files: AGRICOLA, ANABSTR, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,  
EMBASE, MEDLINE, TOXCENTER, USPATFULL, VETU

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

188 REFERENCES IN FILE CA (1907 TO DATE)  
22 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
189 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> exp diacetyl chitobiose/cn

E1	1	DIACETYL CELLULOSE/CN
E2	1	DIACETYL CHITIN/CN
E3	0 -->	DIACETYL CHITOBIOSE/CN
E4	1	DIACETYL CHLORAMPHENICOL CARBOXYLESTERASE/CN
E5	1	DIACETYL CHLORAMPHENICOL ESTERASE/CN
E6	1	DIACETYL CIRSIMARITIN/CN
E7	1	DIACETYL CIRSMARITIN/CN
E8	1	DIACETYL CUSPIDIOL/CN
E9	1	DIACETYL DIANIL/CN
E10	1	DIACETYL DIBUTYL STANNANE/CN
E11	1	DIACETYL DIHYDRAZONE/CN
E12	1	DIACETYL DIMER/CN

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	16.14	16.35

FILE 'STNGUIDE' ENTERED AT 17:12:35 ON 28 FEB 2008  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Feb 22, 2008 (20080222/UP).

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.18	16.53

FILE 'HCAPLUS' ENTERED AT 17:14:05 ON 28 FEB 2008  
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FILE COVERS 1907 - 28 Feb 2008 VOL 148 ISS 9  
FILE LAST UPDATED: 27 Feb 2008 (20080227/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 11 or 12 or diacetylglucosamine or triacetylglucosamine

```
      272 L1
      189 L2
        3 DIACETYLGLUCOSAMINE
       13 TRIACETYLGLUCOSAMINE
L3      357 L1 OR L2 OR DIACETYLGLUCOSAMINE OR TRIACETYLGLUCOSAMINE
```

=> s SIRS or (systemic inflammatory response) or sepsis or septic

```
      1003 SIRS
     110508 SYSTEMIC
     198863 INFLAMMATORY
    1643120 RESPONSE
      2176 SYSTEMIC INFLAMMATORY RESPONSE
           (SYSTEMIC (W) INFLAMMATORY (W) RESPONSE)
     16790 SEPSIS
     14461 SEPTIC
L4      27811 SIRS OR (SYSTEMIC INFLAMMATORY RESPONSE) OR SEPSIS OR SEPTIC
```

=> s 13 and 14

L5 2 L3 AND L4

=> s 15 and (PY<2003 or AY<2003 or PRY<2003)

```
      22929010 PY<2003
      4478548 AY<2003
      3953774 PRY<2003
L6      0 L5 AND (PY<2003 OR AY<2003 OR PRY<2003)
```

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.69	19.22

FILE 'STNGUIDE' ENTERED AT 17:14:13 ON 28 FEB 2008  
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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Feb 22, 2008 (20080222/UP).

=> d 15 1-2 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L5 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI Methods of treating inflammation  
AB Methods and compns. for treating myocardial dysfunction or inflammation are described. The methods of the invention involve administering an agent that can inhibit lysozyme to an animal in need thereof. Preferred lysozyme inhibitors include TAC (N,N',N"-triacyetylglucosamine, chitotriose) and chitobiose.  
AN 2004:905606 HCAPLUS <<LOGINID::20080228>>  
DN 141:360677  
TI Methods of treating inflammation  
IN Mink, Steven N.; Jacobs, Hans; Bose, Deepak; Duke, Krika; Light, R. Bruce  
PA Can.  
SO U.S. Pat. Appl. Publ., 70 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2004214792	A1	20041028	US 2004-762581	20040123
	CA 2428744	A1	20040724	CA 2003-2428744	20030512
PRAI	US 2003-442060P	P	20030124		

L5 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI N,N',N"-triacyetylglucosamine, an inhibitor of lysozyme, prevents myocardial depression in Escherichia coli sepsis in dogs  
AB OBJECTIVE: Reversible myocardial depression in sepsis has been ascribed to the release of inflammatory mediators. We recently found that lysozyme c (Lzm-S), consistent with that originating from the spleen, was a mediator of myocardial depression in an Escherichia coli model of septic shock in dogs. We further showed in a right ventricular trabecular (RVT) preparation that Lzm-S's depressant activity could be blocked by N,N',N" triacyetylglucosamine (TAC), a competitive inhibitor of Lzm-S. We hypothesized that Lzm-S binds to or cleaves a cardiac membrane glycoprotein, thereby interfering with myocardial contraction in sepsis. In the present study, we examined whether TAC could prevent myocardial depression in an in vivo preparation and whether other related N-acetylglucosamine (NAG) structures could also inhibit Lzm-S's effect in RVT. DESIGN: Randomized exptl. study. SETTING: University laboratory  
SUBJECTS: Anesthetized, mech. ventilated dogs. INTERVENTIONS: We produced sepsis by infusion of E. coli over an approx. 6-h period.  
MEASUREMENTS AND MAIN RESULTS: We examined the effect of TAC on stroke work, our primary index of myocardial function, when treatment was administered before sepsis (pretreatment) and after 1.5 h (early treatment study) and 3.5 h of sepsis (late treatment study; LTS). In the pretreatment study and early treatment study, myocardial depression would have not yet occurred but would have already been present in the late treatment study. In RVT, we assessed the effect of other NAG oligosaccharides and variants to the NAG structure on Lzm-S's depressant activity. In pretreatment and the early treatment study, TAC prevented

the reduction in stroke work observed in nontreated septic groups but did not reverse the reduction found in the late treatment study. In RVT, of the compds. tested, only N,N'-diacetylglucosamine showed an inhibitory effect. CONCLUSIONS: We found that TAC, a competitive inhibitor of Lzm-S, prevented myocardial depression in exptl. sepsis. Only specific NAG structures are inhibitory to Lzm-S's depressant activity. TAC may be useful in attenuating cardiovascular collapse in sepsis.

AN 2004:10964 HCAPLUS <<LOGINID::20080228>>  
 DN 141:133790  
 TI N,N',N"-triacetylglucosamine, an inhibitor of lysozyme, prevents myocardial depression in Escherichia coli sepsis in dogs  
 AU Mink, Steven N.; Jacobs, Hans; Duke, Krika; Bose, Deepak; Cheng, Zhao-Qin; Light, R. Bruce  
 CS Departments of Pharmacology and Therapeutics, University of Manitoba, Winnipeg, MB, R3E 0Z3, Can.  
 SO Critical Care Medicine (2004), 32(1), 184-193  
 CODEN: CCMDC7; ISSN: 0090-3493  
 PB Lippincott Williams & Wilkins  
 DT Journal  
 LA English  
 RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file hcaplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.12	27.91
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-1.60

FILE 'HCAPLUS' ENTERED AT 17:15:22 ON 28 FEB 2008  
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FILE COVERS 1907 - 28 Feb 2008 VOL 148 ISS 9  
 FILE LAST UPDATED: 27 Feb 2008 (20080227/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s inflamm? or antiinflamm? or antibacterial

305729 INFLAMM?



55586 ANTIINFLAMM?  
102327 ANTIBACTERIAL  
L7 409786 INFLAMM? OR ANTIINFLAMM? OR ANTIBACTERIAL

=> s 13 and 17

L8 12 L3 AND L7

=> fiel stnguide

FIEL IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> s 18 and (PY<2003 or AY<2003 or PRY<2003)

22929010 PY<2003

4478548 AY<2003

3953774 PRY<2003

L9 7 L8 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d 19 1-7 ti abs bib

L9 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Combination of amino sugars and cysteine or cysteine derivatives

AB The present invention relates to chemical complexes consisting of cysteine or derivs. of cysteine and an aminosugar as well as pharmaceutical compns. and dietary supplements comprising such complexes. The invention further relates to the use of such compns. or complexes for the preparation of a medicament or a dietary supplement in the suppression of hypersensitivity and inflammatory reactions such as rheumatic or dermatol. disorders or to a method of treating such diseases by administering such compns. and complexes. Capsules contain an example complex formed from N-acetylcysteine and glucosamine sulfate. A complex of N-acetylcysteini with glucosamine K sulfate salt had an anti-inflammatory effect in the carrageenin-induced paw edema test in rats.

AN 2003:22691 HCAPLUS <<LOGINID::20080228>>

DN 138:78479

TI Combination of amino sugars and cysteine or cysteine derivatives

IN Weidner, Morten Sloth

PA Astion A/S, Den.

SO PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2003002125	A2	20030109	WO 2002-DK446	20020628 <--
	WO 2003002125	A3	20031106		
	WO 2003002125	B1	20040521		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

	AU 2002319110	A1	20030303	AU 2002-319110	20020628 <--
	US 2003162732	A1	20030828	US 2002-185982	20020628 <--
PRAI	DK 2001-1038	A	20010629	<--	
	DK 2001-1056	A	20010704	<--	
	US 2001-303298P	P	20010705	<--	
	WO 2002-DK446	W	20020628	<--	

L9 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Chlamydia oligosaccharides

AB The carbohydrate moieties of the major outer membrane protein (MOMP) which are involved in the attachment of C. trachomatis and other chlamydiae to host mammalian cells can be used to block attachment and infectivity of chlamydiae. Thus, among the objects of the instant invention are the identification of the relevant oligosaccharides which mediate the binding of various chlamydiae to mammalian cells, which mediate the infectivity of various chlamydiae in mammalian cells, compns. comprising same and methods for using same to block binding of and infectivity of chlamydiae in a host. Those and other objects of the instant invention have been attained by the discovery of novel N-linked structures in chlamydia MOMP, of a "high mannose-type" which mediate binding of chlamydiae to mammalian host cells. Thus, the instant invention includes compns. and methods for precluding attachment of chlamydiae to host cells.

AN 2002:315462 HCAPLUS <<LOGINID::20080228>>

DN 136:335216

TI Chlamydia oligosaccharides

IN Kuo, Cho-chou; Swanson, Albertina F.; Hakomori, Senitiroh; Takahashi, Noriko

PA USA

SO U.S. Pat. Appl. Publ., 18 pp., Cont. of U.S. Ser. No. 230,346.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 2002049172	A1	20020425	US 2001-950684	20010913 <--
	US 2002173483	A1	20021121	US 1999-230346	19990219 <--
	US 2004121984	A1	20040624	US 2003-714842	20031118 <--
PRAI	US 1999-230346	A1	19990219	<--	
	US 1996-672849	B2	19960725	<--	
	WO 1997-US13037	W	19970725	<--	
	US 2001-950684	B1	20010913	<--	

L9 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Treatment of C. difficile toxin B associated conditions

AB This invention relates to prevention and/or treatment of antibiotic associated diarrhea, including Clostridium difficile associated diarrhea (CDAD),

pseudomembranous colitis (PMC) and other conditions associated with C. difficile infection, using oligosaccharide compns. which bind C. difficile toxin B. More specifically, the invention concerns neutralization of C. difficile toxin B associated with such conditions. Examples are provided on neutralization of C. difficile toxins A and B by SYNSORBs and on effect of preincubation of toxin B with SYNSORBs on transepithelial resistance in human colonic tissue.

AN 2002:213816 HCAPLUS <<LOGINID::20080228>>

DN 136:241677

TI Treatment of C. difficile toxin B associated conditions

IN Heerze, Louis D.; Armstrong, Glen D.

PA Synsorb Biotech Inc., Can.

SO U.S., 14 pp., Cont.-in-part of U.S. 6,013,635.

CODEN: USXXAM

DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6358930	B1	20020319	US 1999-433944	19991104 <--
	US 6013635	A	20000111	US 1998-85032	19980528 <--
	EP 1704865	A2	20060927	EP 2006-9088	19990527 <--
	EP 1704865	A3	20061206		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	US 6107282	A	20000822	US 1999-419790	19991018 <--
	US 6465435	B1	20021015	US 2000-593040	20000613 <--
	CA 2388187	A1	20010510	CA 2000-2388187	20001103 <--
	WO 2001032219	A2	20010510	WO 2000-CA1312	20001103 <--
	WO 2001032219	A3	20020404		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1250153	A2	20021023	EP 2000-974214	20001103 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003513051	T	20030408	JP 2001-534423	20001103 <--
	JP 2006213735	A	20060817	JP 2006-136969	20060516 <--
PRAI	US 1998-85032	A2	19980528	<--	
	EP 1999-924602	A3	19990527	<--	
	JP 2000-550491	A3	19990527	<--	
	US 1999-419790	A1	19991018	<--	
	US 1999-433944	A	19991104	<--	
	WO 2000-CA1312	W	20001103	<--	

RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI Chlamydia mannose-containing oligosaccharides, and use in inhibiting chlamydial infectivity  
AB Mannose-containing, branched oligosaccharides mediate binding of chlamydia to mammalian cells. The "high mannose-type" glycan was found to block adhesion of chlamydiae to mammalian cells and thus to inhibit infectivity. The glycan and its mimetics, including multivalent derivs., can be used as agents for treatment or prevention of chlamydia-based human diseases.  
AN 1998:98333 HCAPLUS <<LOGINID::20080228>>  
DN 128:188617  
TI Chlamydia mannose-containing oligosaccharides, and use in inhibiting chlamydial infectivity  
IN Takahashi, Noriko; Kuo, Cho-Chou; Swanson, Albertina F.; Hakomori, Sen-Itiroh  
PA Biomembrane Institute, USA; University of Washington  
SO PCT Int. Appl., 41 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI	WO 9804272	A1	19980205	WO 1997-US13037	19970725 <--
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 2002173483	A1	20021121	US 1999-230346	19990219 <--
	US 2003139375	A1	20030724	US 2002-287587	20021105 <--
	US 2004121984	A1	20040624	US 2003-714842	20031118 <--
	US 2004138173	A1	20040715	US 2003-732281	20031211 <--
	US 7053067	B2	20060530		
	US 2006183710	A1	20060817	US 2006-376337	20060316 <--
PRAI	US 1996-672849	A2	19960725	<--	
	WO 1997-US13037	W	19970725	<--	
	US 1999-230346	B1	19990219	<--	
	US 2001-950684	B1	20010913	<--	
	US 2002-287587	B1	20021105	<--	
	US 2003-732281	A3	20031211		

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Human antilipid A monoclonal antibodies bind to human B cells and the i antigen on cord red blood cells

AB The authors describe two independently derived human mAb, A6(H4C5) and 216, initially selected for their reactivity to the lipid A domain of bacterial LPS, which also react with the following Ag: the i Ag present on cord RBC, a ligand on human B lymphocytes, and to certain autoantigens, defining these mAb as polyreactive. Both mAb have specific affinity for a carbohydrate epitope consisting minimally of a disaccharide with an acyl substitution at the 2-carbon position. Structural examination of the diverse Ag recognized by the two antibodies reveals the presence of this carbohydrate structure required for antibody binding. A6(H4C5) and 216 are IgM of isotype, but differ in their L chain expression. Mol. anal. shows that both mAb are encoded by a highly conserved VH4 gene, designated VH4-21. This gene encodes a number of autoantibodies, particularly cold agglutinins. Specific recognition of lipid A and of a carbohydrate epitope on B-lymphocytes by the two human mAb suggests a dual function for the highly conserved VH4-21 gene in antibacterial response and in B cell development and regulation.

AN 1994:6474 HCAPLUS <<LOGINID::20080228>>

DN 120:6474

TI Human antilipid A monoclonal antibodies bind to human B cells and the i antigen on cord red blood cells

AU Bhat, Neelima M.; Bieber, Marcia M.; Chapman, C. J.; Stevenson, Fred K.; Teng, Nelson N. H.

CS Dep. Gynecol. Obstet., Stanford Med. Cent., Stanford, CA, USA

SO Journal of Immunology (1993), 151, 5011-21

CODEN: JOIMA3; ISSN: 0022-1767

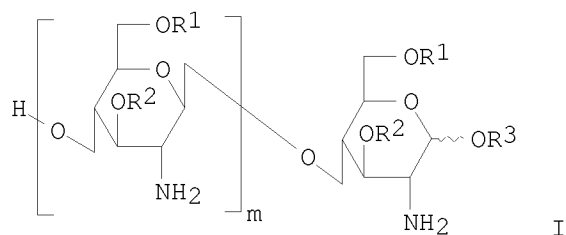
DT Journal

LA English

L9 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Novel glucosamine derivative and liposome containing the same as membrane component

GI



AB Glucosamine derivs. [I; R1, R2 = H, CO(CH<sub>2</sub>)<sub>n</sub>Me; n = 10-22; provided that R1 = R2 ≠ H; R3 = H, lower alkyl; m = 0-3], also useful as cationic surfactants and adjuvants for preparation of antibodies, are prepared A

liposome

consists of I, a sterol-series stabilizer, and/or an antioxidant, and phospholipid as membrane components and encapsulates a physiol. active substance, e.g. an antiinflammatory agent, O-carrier, enzyme, antibiotic, hormone, anticancer agent, and particularly superoxide dismutase (SOD). Thus, 9.3 g Me N-benzyloxycarbonyl-D-glucosaminide was stirred with palmitoyl chloride in pyridine for 24 h at room temperature to

give

52% Me N-benzyloxycarbonyl-6-O-palmitoyl-D-glucosaminide which was hydrogenolized over 5% Pd/C in MeOH to give 85% Me 6-O-palmitoyl-D-glucosaminide (II). A liposome consisting of phosphatidylcholine, cholesterol, and II (7:2:1) showed 40.0% encapsulation rate of SOD vs. 3.2% when a liposome without II was used.

AN 1991:515012 HCAPLUS <<LOGINID::20080228>>

DN 115:115012

TI Novel glucosamine derivative and liposome containing the same as membrane component

IN Miyajima, Koichiro; Fuji, Kaoru

PA Japan Tobacco, Inc., Japan

SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9107416	A1	19910530	WO 1990-JP1458	19901109 <--
	W: CA, KR, US				
	RW: BE, CH, DE, FR, GB, GR, IT, SE				
	JP 03218389	A	19910925	JP 1990-281988	19901022 <--
	JP 04159216	A	19920602	JP 1990-281989	19901022 <--
	CA 2045550	A1	19910510	CA 1990-2045550	19901109 <--
	EP 457910	A1	19911127	EP 1990-916363	19901109 <--
	R: BE, CH, DE, FR, GB, IT, LI, SE				
	WO 9206987	A1	19920430	WO 1990-JP1506	19901119 <--
	RW: AT, DK, ES, GR				
	US 5304380	A	19940419	US 1992-895444	19920608 <--
PRAI	JP 1989-289933	A	19891109	<--	
	JP 1990-281988	A	19901022	<--	
	JP 1990-281989	A	19901022	<--	
	WO 1990-JP1458	W	19901109	<--	
	US 1991-720479	B1	19910709	<--	
OS	MARPAT 115:115012				

L9 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Potential role of lysozyme in bactericidal activity of in vitro-acquired

salivary pellicle against Streptococcus faecium 9790  
AB The adherence of S. faecium 9790 to hydroxyapatite (HA) coated with whole human saliva supernatant proteins (S-HA) or parotid fluid proteins was studied. The organism was labeled with [3H]thymidine, and adherence was estimated as the radioactivity remaining associated with the variously coated

HA preps. after incubation and removal of unbound microbes by washing the adherence substratum. Adherence was time dependent and saturable, characteristics typical of oral streptococci in this in vitro adherence model system. However, adherence to S-HA, but not bare HA, was decreased 20-fold at 4° compared with room temperature. Furthermore, adherence at 4° to S-HA was decreased 20-fold relative to bare HA at 4°. Adherence to HA coated with parotid fluid proteins also was reduced at 4°. The magnitude of the temperature dependence and the inhibitory effect at 4° of whole saliva or parotid fluid pellicles on HA was unexpected. Of several sugars and amino sugars tested, the chitin saccharides, chitotriose, chitobiose, and N-acetylglucosamine, caused >90% inhibition of adherence to S-HA. These same saccharides were previously shown to inhibit lysozyme, polylysine, or autolytic lysis of the organism (N. J. Laible and G. R. Germaine, 1985). Examination of unbound and adherent microbes revealed that lysis of the organism occurred during the adherence assays. A strong association between the extent of lysis and the extent of adherence was found under a variety of conditions. Depletion of lysozyme from saliva specimens used to coat HA resulted in a >90% decrease in both cell lysis and adherence. Lysis of the microbe appeared dependent upon the presence of the saliva pellicle (coating) on HA, since solns. containing proteins desorbed from HA during mock-adherence incubations possessed lytic activity that was 2-10-fold too low to account for the extents of lysis observed with ≥108 input cells. These results demonstrate the potential antibacterial activity of acquired salivary pellicle on enamel in vivo and the likely role of lysozyme in this activity. The data also serve to caution that this widely used in vitro adherence model will not distinguish whole-cell adherence from the adsorption of radiolabeled DNA released from lysing cells. Several addnl. controls are suggested that will indicate whether test microbes remain intact or lyse during adherence trials.

AN 1987:48488 HCAPLUS <<LOGINID::20080228>>

DN 106:48488

TI Potential role of lysozyme in bactericidal activity of in vitro-acquired salivary pellicle against Streptococcus faecium 9790

AU Germaine, Greg R.; Tellefson, Lois M.

CS Sch. Dent., Univ. Minnesota, Minneapolis, MN, 55455, USA

SO Infection and Immunity (1986), 54(3), 846-54

CODEN: INFIBR; ISSN: 0019-9567

DT Journal

LA English

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

23.06

50.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

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-7.20

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LAST RELOADED: Feb 22, 2008 (20080222/UP).

=> d his

(FILE 'HOME' ENTERED AT 17:09:55 ON 28 FEB 2008)

FILE 'REGISTRY' ENTERED AT 17:10:08 ON 28 FEB 2008

EXP CHITOBIOSE/CN  
L1 1 S E3  
EXP CHITOTRIOSE/CN  
L2 1 S E3  
EXP DIACETYLGLUCOSAMINE  
EXP DIACETYLGLUCOSAMINE/CN  
EXP N,N-DIACETYLGLUCOSAMINE/CN  
EXP DIACETYL CHITOBIOSE/CN

FILE 'STNGUIDE' ENTERED AT 17:12:35 ON 28 FEB 2008

FILE 'HCAPLUS' ENTERED AT 17:14:05 ON 28 FEB 2008

L3 357 S L1 OR L2 OR DIACETYLGLUCOSAMINE OR TRIACETYLGLUCOSAMINE  
L4 27811 S SIRS OR (SYSTEMIC INFLAMMATORY RESPONSE) OR SEPSIS OR SEPTIC  
L5 2 S L3 AND L4  
L6 0 S L5 AND (PY<2003 OR AY<2003 OR PRY<2003)

FILE 'STNGUIDE' ENTERED AT 17:14:13 ON 28 FEB 2008

FILE 'HCAPLUS' ENTERED AT 17:14:24 ON 28 FEB 2008

FILE 'STNGUIDE' ENTERED AT 17:14:24 ON 28 FEB 2008

FILE 'HCAPLUS' ENTERED AT 17:15:22 ON 28 FEB 2008

L7 409786 S INFLAMM? OR ANTIINFLAMM? OR ANTIBACTERIAL  
L8 12 S L3 AND L7  
L9 7 S L8 AND (PY<2003 OR AY<2003 OR PRY<2003)

FILE 'STNGUIDE' ENTERED AT 17:15:54 ON 28 FEB 2008

=> log hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	51.03
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-7.20

SESSION WILL BE HELD FOR 120 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 17:16:07 ON 28 FEB 2008

Connecting via Winsock to STN

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:47:06 ON 29 FEB 2008  
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STRUCTURE FILE UPDATES: 28 FEB 2008 HIGHEST RN 1005771-38-9  
DICTIONARY FILE UPDATES: 28 FEB 2008 HIGHEST RN 1005771-38-9

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> s chitobiose/cn  
L1 1 CHITOBIOSE/CN

=> s chitotriose/cn  
L2 1 CHITOTRIOSE/CN

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	10.76	10.97

FILE 'HCAPLUS' ENTERED AT 08:47:23 ON 29 FEB 2008  
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FILE COVERS 1907 - 29 Feb 2008 VOL 148 ISS 10  
FILE LAST UPDATED: 28 Feb 2008 (20080228/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l1 or l2 or diacetylglucosamine or triacetylglucosamine  
272 L1  
189 L2  
3 DIACETYLGLUCOSAMINE  
13 TRIACETYLGLUCOSAMINE



L3 357 L1 OR L2 OR DIACETYLGLUCOSAMINE OR TRIACETYLGLUCOSAMINE

=> s lysozyme

L4 30943 LYSOZYME

=> s l3 and l4

L5 61 L3 AND L4

=> s l5 and (PY<2003 or AY<2003 or PRY<2003)

22929004 PY<2003

4478702 AY<2003

3953937 PRY<2003

L6 53 L5 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

5.38

16.35

FILE 'STNGUIDE' ENTERED AT 08:48:34 ON 29 FEB 2008

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Feb 22, 2008 (20080222/UP).

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.12

16.47

FILE 'HCAPLUS' ENTERED AT 08:49:38 ON 29 FEB 2008

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FILE COVERS 1907 - 29 Feb 2008 VOL 148 ISS 10

FILE LAST UPDATED: 28 Feb 2008 (20080228/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s (triacetyl chitotriose)

2944 TRIACETYL

295 CHITOTRIOSE

L7 11 (TRACETYL CHITOTRIOSE)

(TRACETYL(W)CHITOTRIOSE)

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.69	19.16

FILE 'STNGUIDE' ENTERED AT 08:49:39 ON 29 FEB 2008  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Feb 22, 2008 (20080222/UP).

=> d 17 1-11 ti

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L7 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI Target-Specific Chemical Acylation of Lectins by Ligand-Tethered DMAP Catalysts

L7 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI Legionella pneumophila type II secretome reveals unique exoproteins and a chitinase that promotes bacterial persistence in the lung

L7 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI A Fluorescent Lectin Array Using Supramolecular Hydrogel for Simple Detection and Pattern Profiling for Various Glycoconjugates

L7 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI Solution- and bound-state conformational study of N,N',N''-triacetyl chitotriose and other analogous potential inhibitors of hevamine: Application of trNOESY and STD NMR spectroscopy

L7 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI An  $\alpha$ -lactalbumin (12His  $\rightarrow$  Leu, 33Thr  $\rightarrow$  Glu, 103Tyr-Ala) mutant acquiring partial activity of lysozyme

L7 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI <sup>1</sup>H NMR study of the interaction of N,N',N''-triacetyl chitotriose with Ac-AMP2, a sugar binding antimicrobial protein isolated from Amaranthus caudatus

L7 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI Structural modifications in Rhizobium meliloti Nod factors influence their stability against hydrolysis by root chitinases

L7 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI inhibition of chitinolytic enzymes from Streptomyces griseus (Bacteria), Artemia salina (Crustacea), and a cell line from Chironomus tentans (Insecta) by allosamidin and isoallosamidin

L7 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI Solanum tuberosum agglutinin accumulation during tuber development

L7 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI Properties of potato lectin fractions isolated from different parts of the tuber and their effect on the growth of Phytophthora infestans

L7 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN  
TI Electron microscopic localization of chitin using colloidal gold labeled  
with wheat germ agglutinin

=> log hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	25.93

SESSION WILL BE HELD FOR 120 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 08:50:07 ON 29 FEB 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'STNGUIDE' AT 08:59:24 ON 29 FEB 2008  
FILE 'STNGUIDE' ENTERED AT 08:59:24 ON 29 FEB 2008  
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	25.93

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	25.93

FILE 'REGISTRY' ENTERED AT 08:59:33 ON 29 FEB 2008  
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STRUCTURE FILE UPDATES: 28 FEB 2008 HIGHEST RN 1005771-38-9  
DICTIONARY FILE UPDATES: 28 FEB 2008 HIGHEST RN 1005771-38-9

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

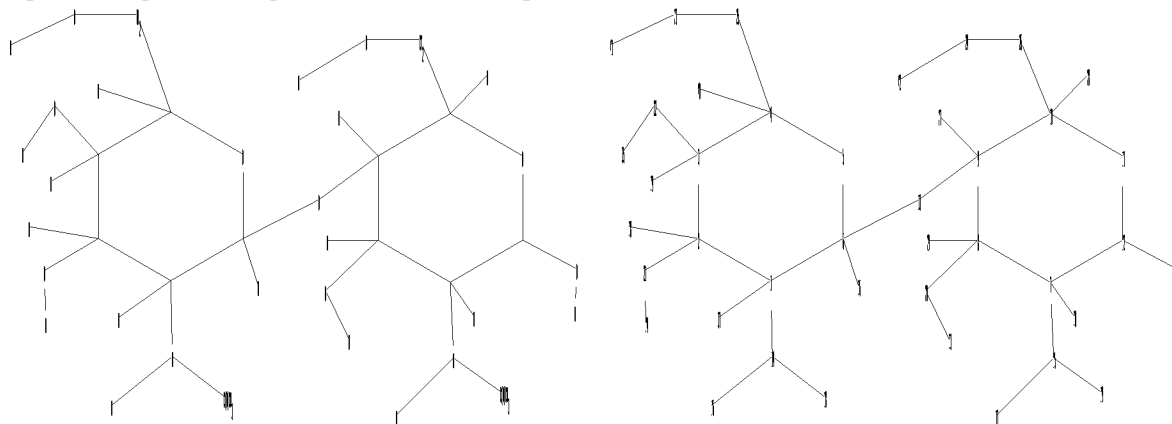
Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

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predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10762581chitobiose.str



chain nodes :

13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33  
34 35 36 37 38 39 40 41 42

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

1-14 1-37 2-21 2-38 3-22 3-39 4-25 4-40 6-13 6-36 7-15 7-30 8-20 8-29  
9-13 9-27 10-26 10-28 12-31 14-16 14-18 15-17 15-19 20-33 21-34 22-35  
23-25 23-41  
24-26 24-42 31-32

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

1-2 1-6 1-14 2-3 2-21 3-4 3-22 4-5 5-6 6-13 7-8 7-12 7-15 8-9 8-20  
9-10 9-13 10-11 11-12 12-31 14-18 15-19

exact bonds :

1-37 2-38 3-39 4-25 4-40 6-36 7-30 8-29 9-27 10-26 10-28 14-16 15-17  
20-33 21-34 22-35 23-25 23-41 24-26 24-42 31-32

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS  
19:CLASS 20:CLASS 21:CLASS  
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS  
30:CLASS  
31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS  
39:CLASS 40:CLASS  
41:CLASS 42:CLASS

L8 STRUCTURE UPLOADED

=> s 18

SAMPLE SEARCH INITIATED 08:59:47 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 738 TO ITERATE

100.0% PROCESSED 738 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 13131 TO 16389  
 PROJECTED ANSWERS: 0 TO 0

L9 0 SEA SSS SAM L8

=> s l8 fam full  
 FULL SEARCH INITIATED 08:59:53 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 1796 TO ITERATE

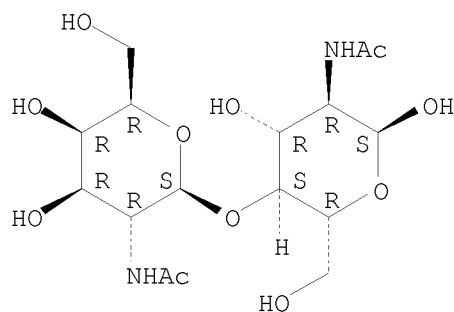
100.0% PROCESSED 1796 ITERATIONS 24 ANSWERS  
 SEARCH TIME: 00.00.01

L10 24 SEA FAM FUL L8

=> d l10 scan

L10 24 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN  $\alpha$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\beta$ -D-galactopyranosyl]-2-deoxy-  
 MF C16 H28 N2 O11

Absolute stereochemistry.



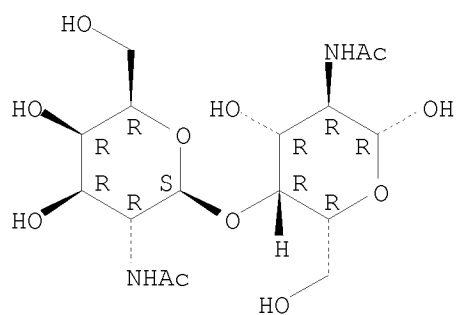
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L10 24 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
 IN D-Galactitol, O-2-(acetylamino)-2-deoxy- $\alpha$ -D-galactopyranosyl-  
 (1 $\rightarrow$ 2)-O-6-deoxy- $\alpha$ -L-galactopyranosyl-[1 $\rightarrow$ 3(or  
 1 $\rightarrow$ 4)]-O-[O-2-(acetylamino)-2-deoxy- $\beta$ -D-galactopyranosyl-  
 (1 $\rightarrow$ 4)-2-(acetylamino)-2-deoxy- $\beta$ -D-galactopyranosyl-  
 [1 $\rightarrow$ 4(or 1 $\rightarrow$ 3)]]-O-2-(acetylamino)-2-deoxy- $\beta$ -D-  
 glucopyranosyl-[1 $\rightarrow$ 3(or 1 $\rightarrow$ 6)]-O-[6-deoxy- $\alpha$ -L-  
 galactopyranosyl-[1 $\rightarrow$ 6(or 1 $\rightarrow$ 3)]]-2-(acetylamino)-2-deoxy-  
 (9CI)  
 MF C52 H89 N5 O34  
 CI IDS

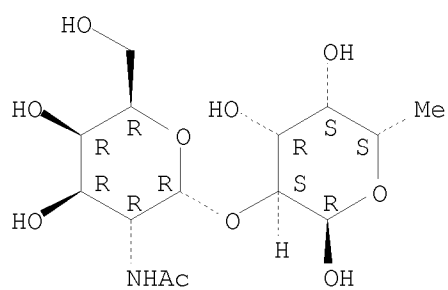
CM 1

Absolute stereochemistry.



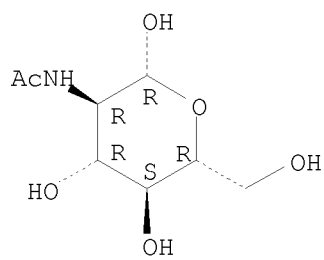
CM 2

Absolute stereochemistry.



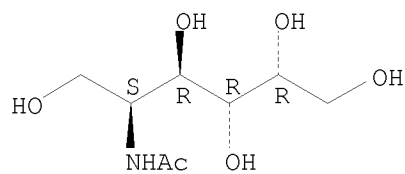
CM 3

Absolute stereochemistry.



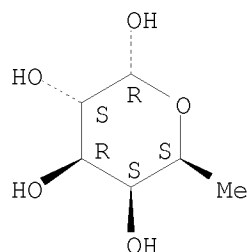
CM 4

Absolute stereochemistry.



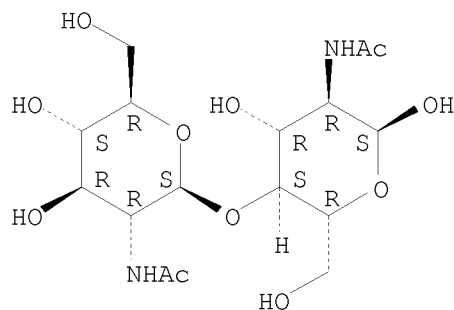
CM 5

Absolute stereochemistry.



L10 24 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
IN  $\alpha$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\beta$ -D-glucopyranosyl]-2-deoxy-, monohydrate (9CI)  
MF C16 H28 N2 O11 . H2 O

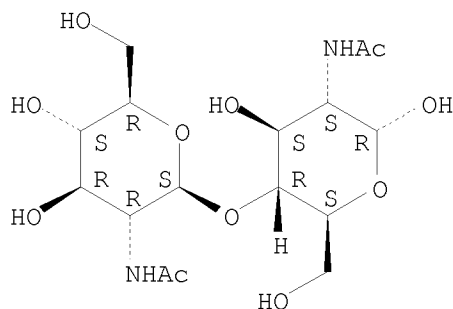
Absolute stereochemistry.



● H<sub>2</sub>O

L10 24 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN  
IN Glucopyranose, 2-acetamido-4-O-(2-acetamido-2-deoxy- $\beta$ -D-  
glucopyranosyl)-2-deoxyl- (7CI)  
MF C16 H28 N2 O11

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):-  
'-' IS NOT VALID HERE

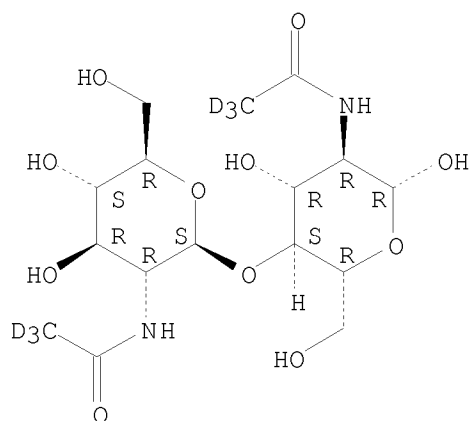
To display more answers, enter the number of answers you would like to see. To end the display, enter "NONE", "N", "0", or "END".

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d 110 1

L10 ANSWER 1 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 952753-71-8 REGISTRY  
 ED Entered STN: 09 Nov 2007  
 CN  $\beta$ -D-Glucopyranose, 2-(acetyl-2,2,2-d3-amino)-4-O-[2-(acetyl-2,2,2-d3-amino)-2-deoxy- $\beta$ -D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C16 H22 D6 N2 O11  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

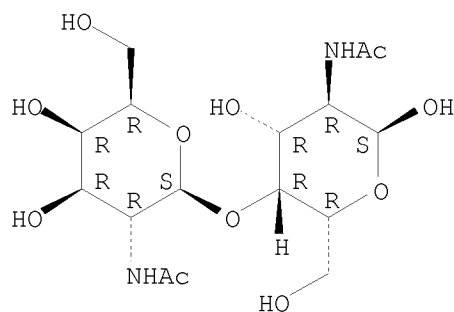


1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 110 2-24

L10 ANSWER 2 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 914671-16-2 REGISTRY  
ED Entered STN: 04 Dec 2006  
CN  $\alpha$ -D-Galactopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\beta$ -D-galactopyranosyl]-2-deoxy- (CA INDEX NAME)  
FS STEREOSEARCH  
MF C16 H28 N2 O11  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

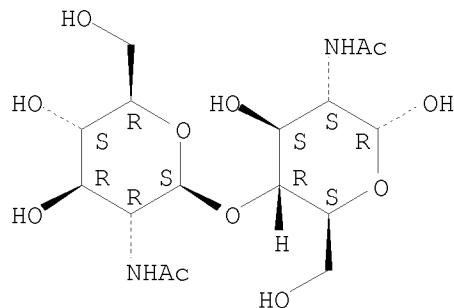


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 3 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 904747-16-6 REGISTRY  
ED Entered STN: 28 Aug 2006  
CN Glucopyranose, 2-acetamido-4-O-(2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl)-2-deoxyl- (7CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C16 H28 N2 O11  
SR CAS EARLY REGISTRATIONS  
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

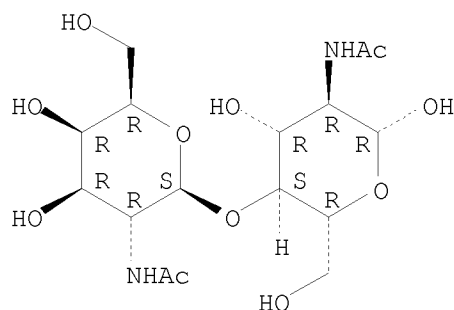
2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 4 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 307345-25-1 REGISTRY  
ED Entered STN: 07 Dec 2000  
CN D-Glucose, O-6-deoxy- $\alpha$ -L-galactopyranosyl-(1 $\rightarrow$ 6)-O-[O- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O- $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 3)-O-[ $\alpha$ -D-mannopyranosyl-(1 $\rightarrow$ 6)]-O- $\beta$ -D-mannopyranosyl-(1 $\rightarrow$ 4)-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)]-2-(acetylamino)-2-deoxy-, mono[2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy- $\beta$ -D-galactopyranosyl]-2-deoxy- $\beta$ -D glucopyranoside] mono[2-(acetylamino)-2-deoxy-4-O- $\beta$ -D-galactopyranosyl- $\beta$ -D-glucopyranoside] (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C84 H140 N6 O60  
CI IDS  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 148682-80-8  
CMF C16 H28 N2 O11

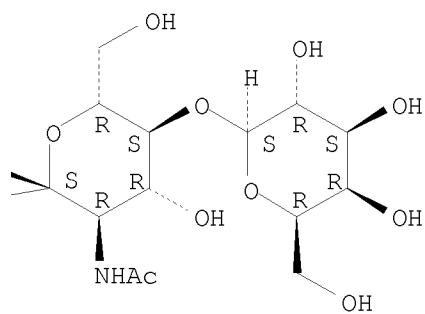
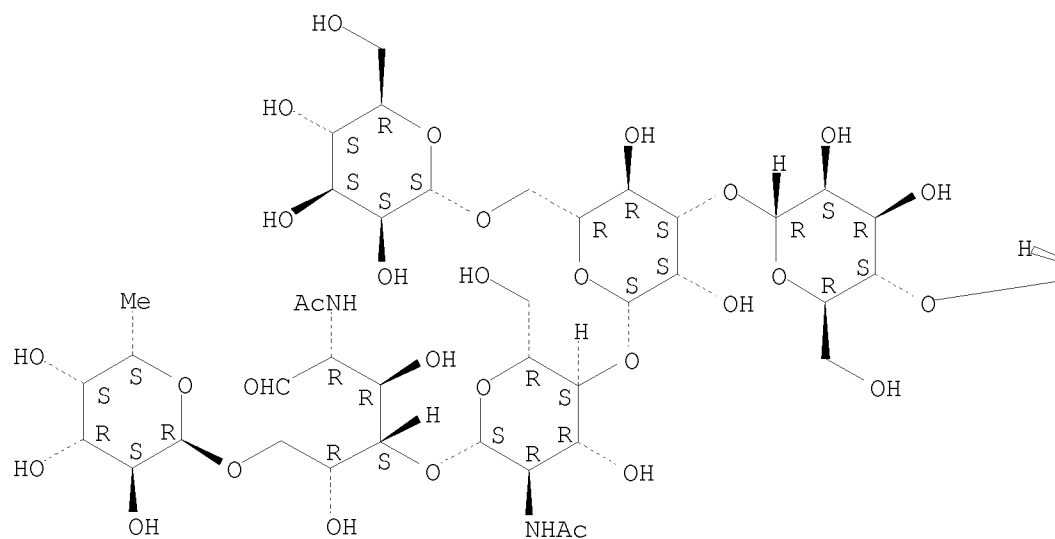
Absolute stereochemistry.



CM 2

CRN 125848-16-0  
CMF C54 H91 N3 O40

Absolute stereochemistry.

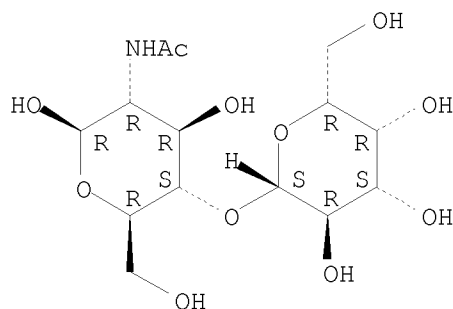


CM 3

CRN 47491-70-3

CMF C14 H25 N O11

Absolute stereochemistry.



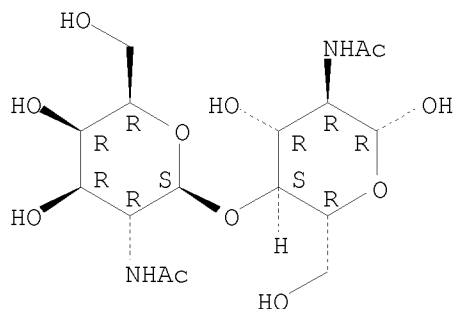
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 5 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 304682-24-4 REGISTRY  
ED Entered STN: 28 Nov 2000  
CN D-Glucose, O-2-(acetylamino)-2-deoxy- $\beta$ -D-galactopyranosyl-  
(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-  
(1 $\rightarrow$ 2)-O- $\alpha$ -D-mannopyranosyl-[1 $\rightarrow$ 3 (or  
1 $\rightarrow$ 6)]-O-[ $\alpha$ -D-mannopyranosyl-[1 $\rightarrow$ 6 (or  
1 $\rightarrow$ 3)]]-O- $\beta$ -D-mannopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-  
deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-[6-deoxy- $\alpha$ -L-  
galactopyranosyl-(1 $\rightarrow$ 6)]-2-(acetylamino)-2-deoxy- (9CI) (CA INDEX  
NAME)  
FS STEREOSEARCH  
MF C56 H94 N4 O40  
CI IDS  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

CRN 148682-80-8  
CMF C16 H28 N2 O11

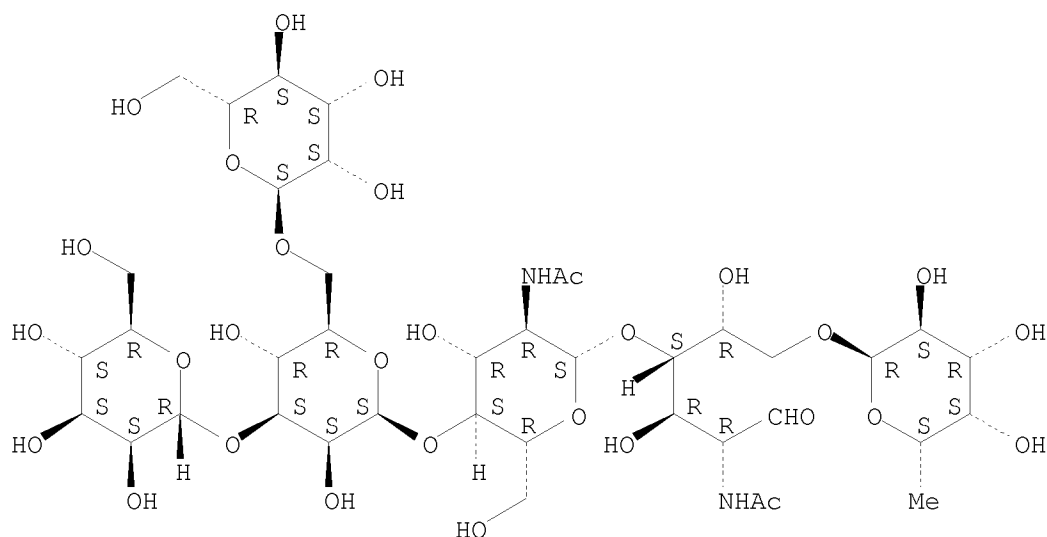
Absolute stereochemistry.



CM 2

CRN 110387-51-4  
CMF C40 H68 N2 O30

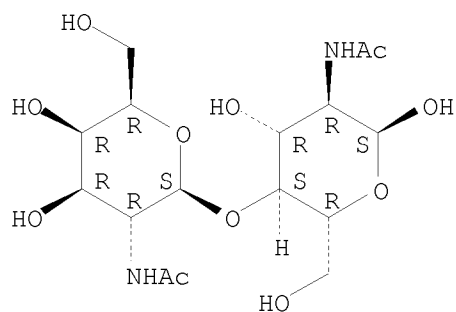
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 6 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 174292-44-5 REGISTRY  
ED Entered STN: 19 Mar 1996  
CN  $\alpha$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\beta$ -D-galactopyranosyl]-2-deoxy- (CA INDEX NAME)  
FS STEREOSEARCH  
MF C16 H28 N2 O11  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



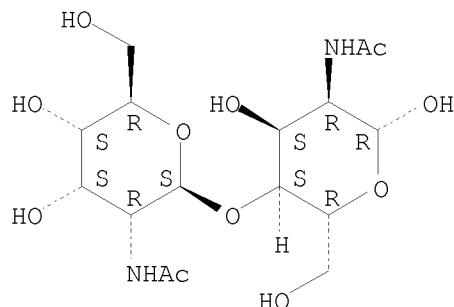
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 7 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 171484-22-3 REGISTRY

ED Entered STN: 19 Dec 1995  
 CN  $\beta$ -D-Allopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy- $\beta$ -D-allopyranosyl]-2-deoxy- (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C16 H28 N2 O11  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

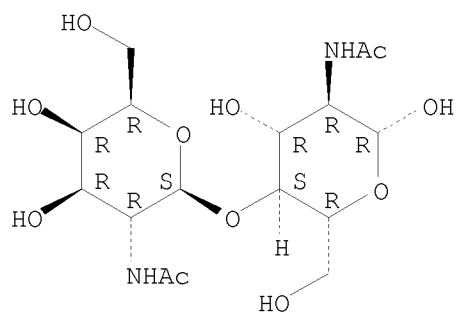
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 8 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 148682-84-2 REGISTRY  
 ED Entered STN: 15 Jul 1993  
 CN D-Glucose, O-2-(acetylamino)-2-deoxy- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-O-[O- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]-O- $\alpha$ -D-mannopyranosyl-[1 $\rightarrow$ 3(or 1 $\rightarrow$ 6)]-O-[O- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -D-mannopyranosyl-[1 $\rightarrow$ 6(or 1 $\rightarrow$ 3)]]-O- $\beta$ -D-mannopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-2-(acetylamino)-2-deoxy- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C78 H130 N6 O56  
 CI IDS  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 148682-80-8  
 CMF C16 H28 N2 O11

Absolute stereochemistry.



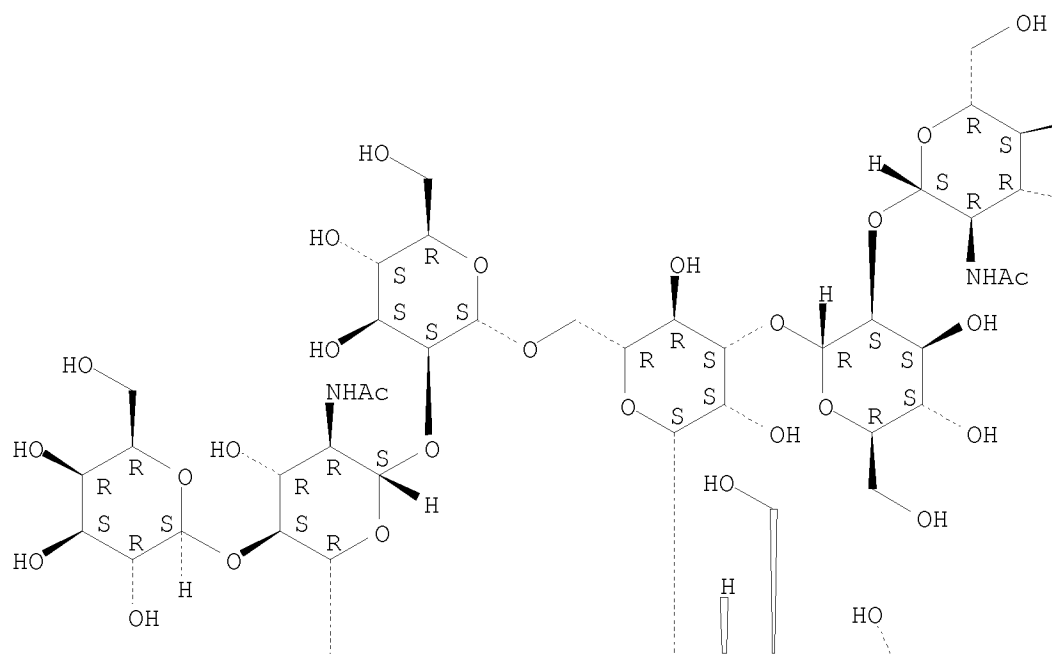
CM 2

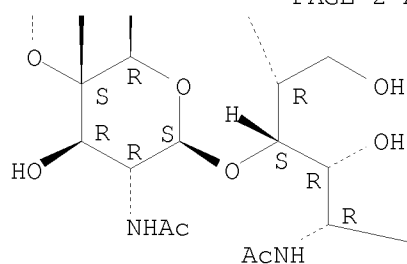
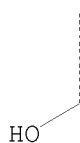
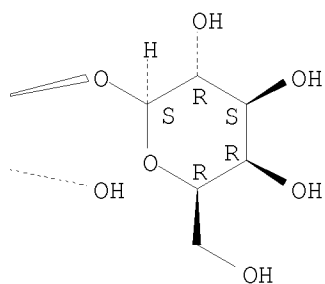
CRN 71496-53-2

CMF C62 H104 N4 O46

Absolute stereochemistry.

PAGE 1-A





1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 9 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 148682-81-9 REGISTRY  
 ED Entered STN: 15 Jul 1993  
 CN D-Glucose, O-2-(acetylamino)-2-deoxy- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-O-[O- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)]-O- $\alpha$ -D-mannopyranosyl-[1 $\rightarrow$ 3(or 1 $\rightarrow$ 6)]-O-[O- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -D-mannopyranosyl-[1 $\rightarrow$ 6(or 1 $\rightarrow$ 3)]]-O- $\beta$ -D-mannopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-[6-deoxy- $\alpha$ -L-galactopyranosyl-(1 $\rightarrow$ 6)]-2-(acetylamino)-2-deoxy- (9CI) (CA INDEX NAME)

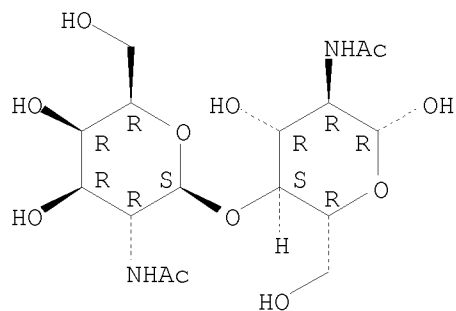


FS STEREOSEARCH  
 MF C84 H140 N6 O60  
 CI IDS  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 148682-80-8  
 CMF C16 H28 N2 O11

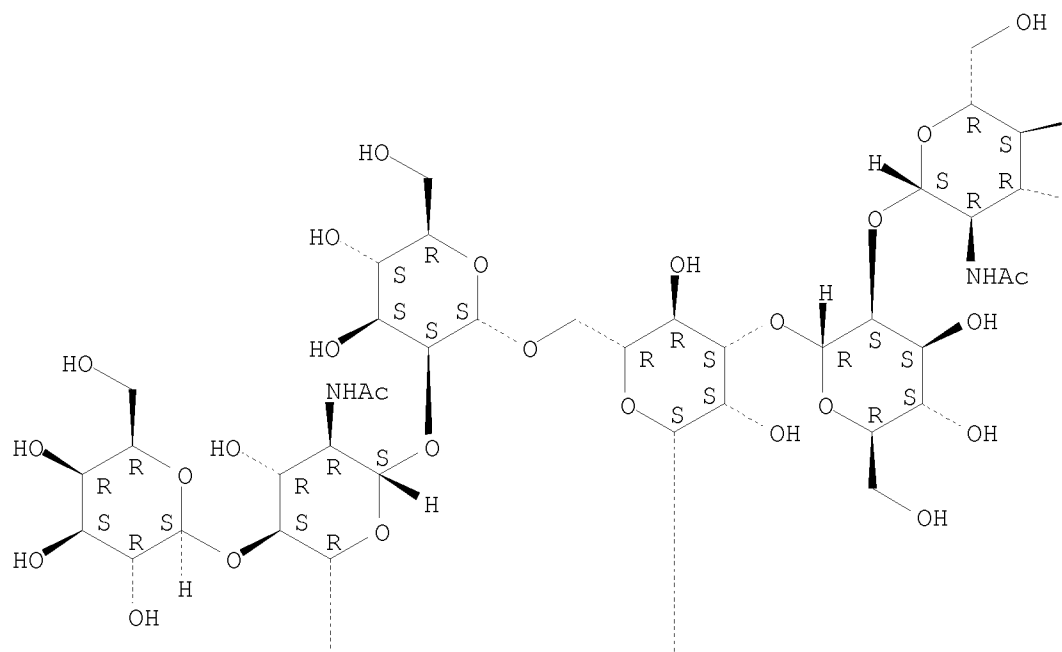
Absolute stereochemistry.



CM 2

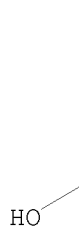
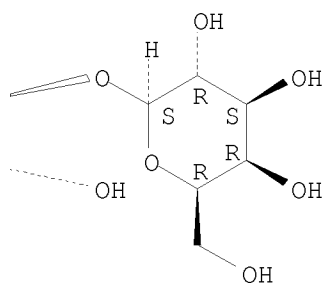
CRN 78392-81-1  
 CMF C68 H114 N4 O50

Absolute stereochemistry.

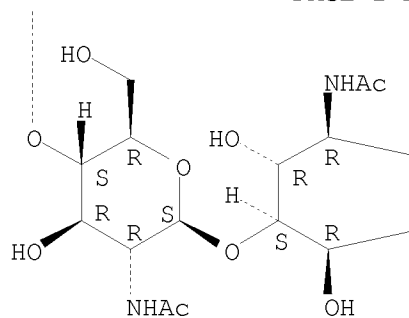


PAGE 1-A

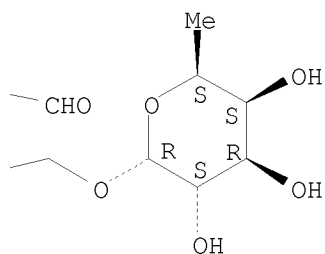
PAGE 1-B



PAGE 2-A



PAGE 2-B

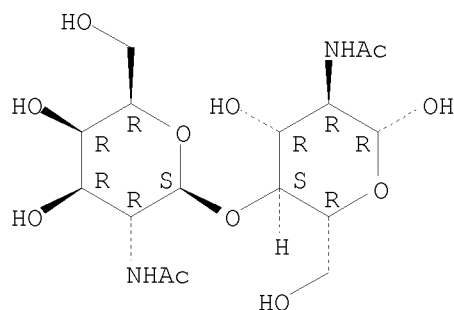


1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 10 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 148682-80-8 REGISTRY  
ED Entered STN: 15 Jul 1993  
CN  $\beta$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\beta$ -D-galactopyranosyl]-2-deoxy- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH

MF C16 H28 N2 O11  
 CI COM  
 SR CA  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

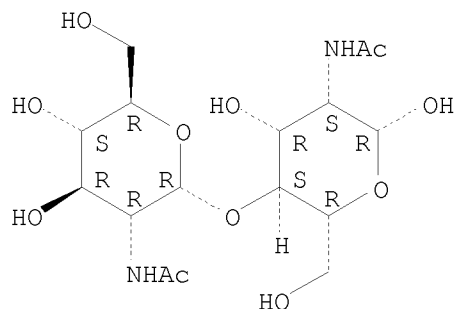


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

10 REFERENCES IN FILE CA (1907 TO DATE)  
 10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 11 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 145841-62-9 REGISTRY  
 ED Entered STN: 11 Feb 1993  
 CN  $\beta$ -D-Mannopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy- $\alpha$ -D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C16 H28 N2 O11  
 SR CA  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

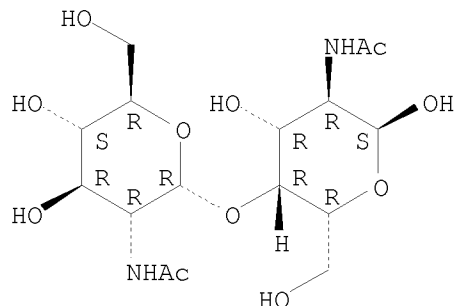


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 12 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 141725-02-2 REGISTRY  
 ED Entered STN: 12 Jun 1992  
 CN  $\alpha$ -D-Galactopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\alpha$ -D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C16 H28 N2 O11  
 SR CA  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

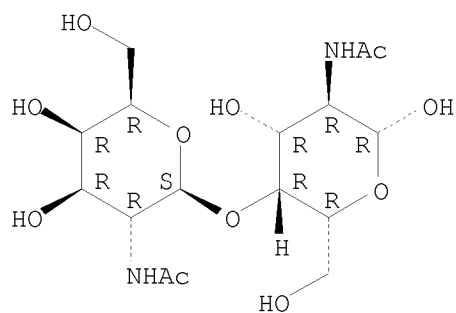
2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 13 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 125760-95-4 REGISTRY  
 ED Entered STN: 09 Mar 1990  
 CN D-Galactitol, O-2-(acetylamino)-2-deoxy- $\alpha$ -D-galactopyranosyl-  
 (1 $\rightarrow$ 2)-O-6-deoxy- $\alpha$ -L-galactopyranosyl-[1 $\rightarrow$ 3(or  
 1 $\rightarrow$ 4)]-O-[O-2-(acetylamino)-2-deoxy- $\beta$ -D-galactopyranosyl-  
 (1 $\rightarrow$ 4)-2-(acetylamino)-2-deoxy- $\beta$ -D-galactopyranosyl-  
 [1 $\rightarrow$ 4(or 1 $\rightarrow$ 3)]]-O-2-(acetylamino)-2-deoxy- $\beta$ -D-  
 glucopyranosyl-[1 $\rightarrow$ 3(or 1 $\rightarrow$ 6)]-O-[6-deoxy- $\alpha$ -L-  
 galactopyranosyl-[1 $\rightarrow$ 6(or 1 $\rightarrow$ 3)]]-2-(acetylamino)-2-deoxy-  
 (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C52 H89 N5 O34  
 CI IDS  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 125760-94-3  
 CMF C16 H28 N2 O11

Absolute stereochemistry.

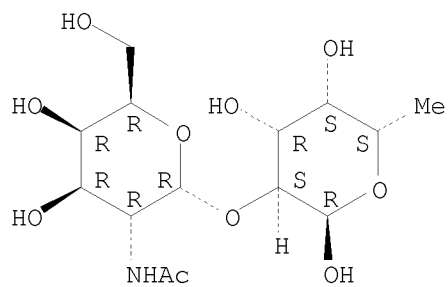


CM 2

CRN 125668-51-1

CMF C14 H25 N O10

Absolute stereochemistry.

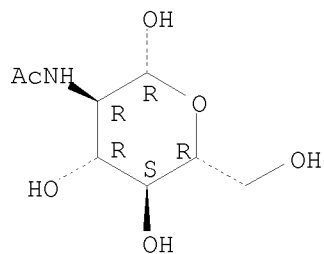


CM 3

CRN 14131-68-1

CMF C8 H15 N O6

Absolute stereochemistry.

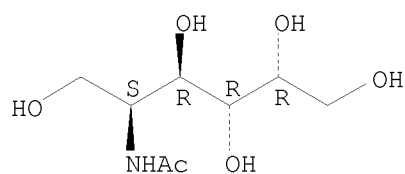


CM 4

CRN 10486-91-6

CMF C8 H17 N O6

Absolute stereochemistry.

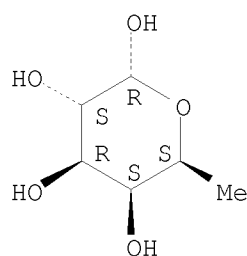


CM 5

CRN 6696-41-9

CMF C6 H12 O5

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 14 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 125760-94-3 REGISTRY

ED Entered STN: 09 Mar 1990

CN  $\beta$ -D-Galactopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\beta$ -D-galactopyranosyl]-2-deoxy- (CA INDEX NAME)

FS STEREOSEARCH

MF C16 H28 N2 O11

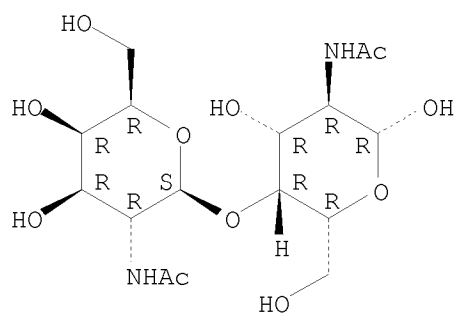
CI COM

SR CA

LC STN Files: BEILSTEIN\*

(\*File contains numerically searchable property data)

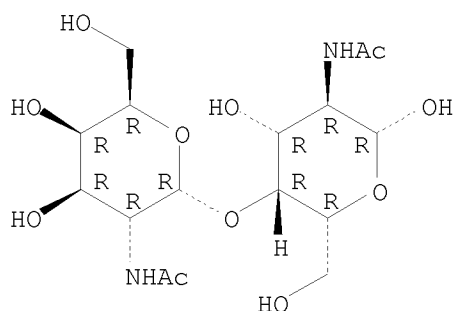
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L10 ANSWER 15 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 119719-43-6 REGISTRY  
ED Entered STN: 24 Mar 1989  
CN  $\beta$ -D-Galactopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy- $\alpha$ -D-galactopyranosyl]-2-deoxy- (CA INDEX NAME)  
FS STEREOSEARCH  
MF C16 H28 N2 O11  
SR CA  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

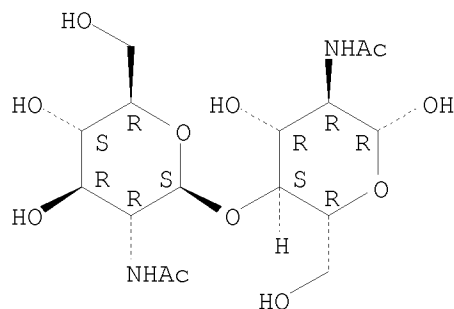
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 16 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 116373-02-5 REGISTRY  
ED Entered STN: 17 Sep 1988  
CN  $\alpha$ -Neuraminic acid, O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1->4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1->?)-N-acetyl- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN D-glycero- $\alpha$ -D-galacto-2-Nonulopyranosonic acid, O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1->4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1->?)-5-(acetylamino)-3,5-dideoxy-  
FS STEREOSEARCH  
MF C27 H45 N3 O19  
CI IDS  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

CRN 35991-83-4  
CMF C16 H28 N2 O11

Absolute stereochemistry.

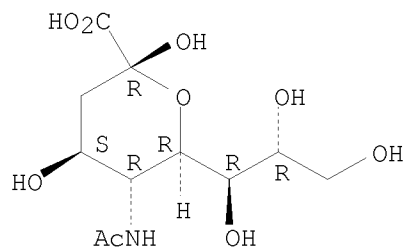


CM 2

CRN 21646-00-4

CMF C11 H19 N O9

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 17 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 109957-93-9 REGISTRY

ED Entered STN: 22 Aug 1987

CN  $\beta$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\beta$ -D-mannopyranosyl]-2-deoxy- (CA INDEX NAME)

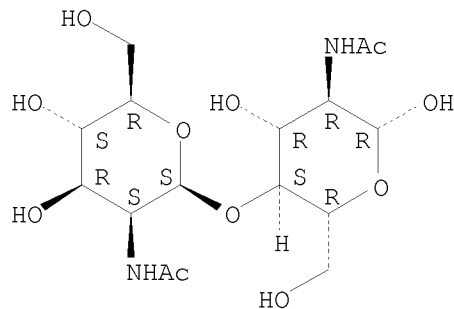
FS STEREOSEARCH

MF C16 H28 N2 O11

SR CA

LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.



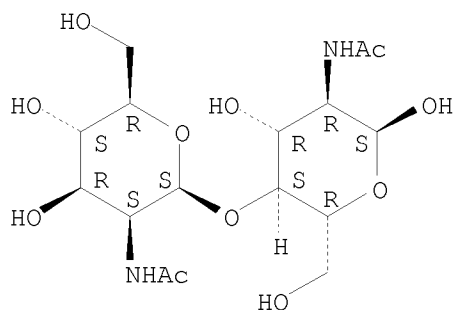


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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 18 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 109957-89-3 REGISTRY  
ED Entered STN: 22 Aug 1987  
CN  $\alpha$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\beta$ -D-mannopyranosyl]-2-deoxy- (CA INDEX NAME)  
FS STEREOSEARCH  
MF C16 H28 N2 O11  
SR CA  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT  
(\*File contains numerically searchable property data)

Absolute stereochemistry.

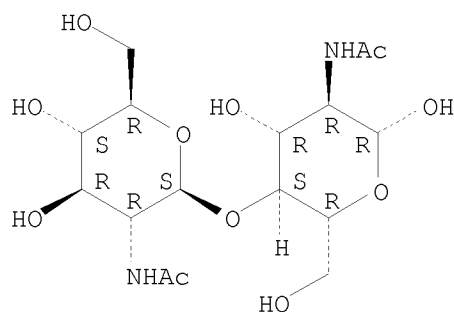


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 19 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 102338-40-9 REGISTRY  
ED Entered STN: 26 May 1986  
CN Neuraminic acid, O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-  
(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-  
(1 $\rightarrow$ ?) -N-acetyl- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN D-glycero-D-galacto-2-Nonulosonic acid, O-2-(acetylamino)-2-deoxy- $\beta$ -D-  
glucopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-  
glucopyranosyl-(1 $\rightarrow$ ?) -5-(acetylamino)-3,5-dideoxy-  
FS STEREOSEARCH  
MF C27 H45 N3 O19  
CI IDS  
SR CA  
LC STN Files: CA, CAPLUS  
  
CM 1  
  
CRN 35991-83-4  
CMF C16 H28 N2 O11

Absolute stereochemistry.

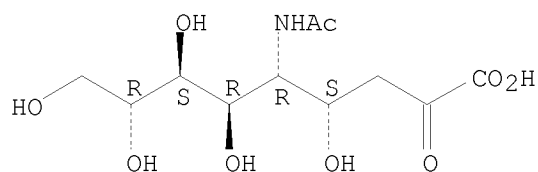


CM 2

CRN 131-48-6

CMF C11 H19 N O9

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 20 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN

RN 64295-28-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN  $\alpha$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl]-2-deoxy-, monohydrate (9CI) (CA INDEX NAME)

OTHER NAMES:

CN  $\alpha$ -N,N'-Diacetylchitobiose monohydrate

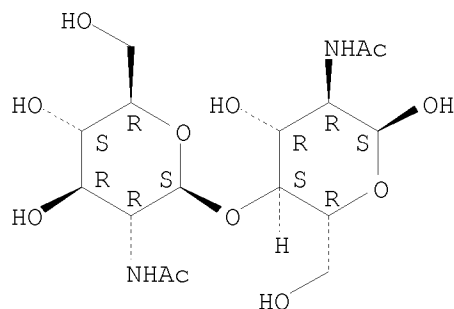
FS STEREOSEARCH

MF C16 H28 N2 O11 . H2 O

LC STN Files: BIOSIS, CA, CAPLUS, CASREACT

CRN (34147-27-8)

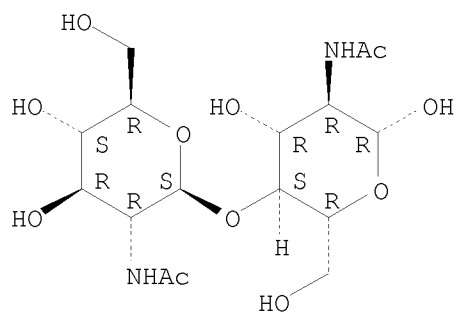
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 21 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 35991-83-4 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN  $\beta$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\beta$ -D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glucopyranose, 2-acetamido-4-O-(2-acetamido-2-deoxy- $\beta$ -D-  
glucopyranosyl)-2-deoxy-,  $\beta$ -D- (7CI)  
FS STEREOSEARCH  
DR 81703-00-6, 439697-31-1  
MF C16 H28 N2 O11  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, TOXCENTER,  
USPAT2, USPATFULL  
(\*File contains numerically searchable property data)

Absolute stereochemistry.

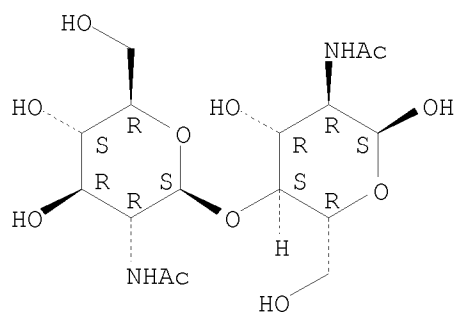


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

54 REFERENCES IN FILE CA (1907 TO DATE)  
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
54 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L10 ANSWER 22 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 34147-27-8 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN  $\alpha$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Glucopyranose, 2-acetamido-4-O-(2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl)-2-deoxy-,  $\alpha$ -D- (8CI)  
 FS STEREOSEARCH  
 MF C16 H28 N2 O11  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

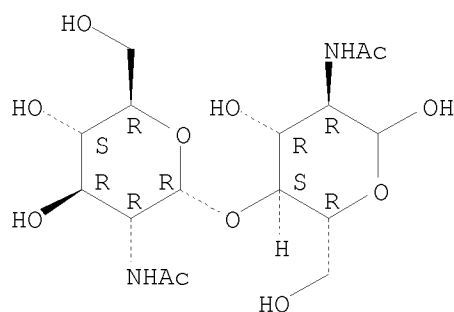


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7 REFERENCES IN FILE CA (1907 TO DATE)  
 7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 23 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 18422-28-1 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Glucopyranose, 2-acetamido-4-O-(2-acetamido-2-deoxy- $\alpha$ -D-glucopyranosyl)-2-deoxy-, D- (8CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C16 H28 N2 O11  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.

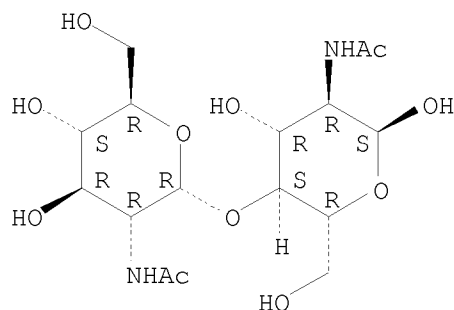


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 24 OF 24 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 14200-67-0 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN  $\alpha$ -D-Glucopyranose, 2-(acetylamino)-4-O-[2-(acetylamino)-2-deoxy-  
 $\alpha$ -D-glucopyranosyl]-2-deoxy- (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Glucopyranose, 2-acetamido-4-O-(2-acetamido-2-deoxy- $\alpha$ -D-  
glucopyranosyl)-2-deoxy-,  $\alpha$ -D- (8CI)  
FS STEREOSEARCH  
MF C16 H28 N2 O11  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
119.03	144.96

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FILE LAST UPDATED: 28 Feb 2008 (20080228/ED)

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<http://www.cas.org/infopolicy.html>

=> s l10

L11 89 L10

=> s l10/thu

89 L10  
984144 THU/RL  
L12 2 L10/THU  
(L10 (L) THU/RL)

=> d l12 1-2 ti abs bib

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

TI Destruction of bacterial spores through glycoconjugate-enhanced phagocytosis

AB The invention discloses methods for enhancing destruction and killing of bacterial spores via phagocytosis, where phagocytosis of bacterial spores is enhanced by using a glycoconjugate. In one embodiment, the method includes modifying a surface of a bacterial spore to increase adherence to a phagocyte, and ingesting the adherence-increased spore with the phagocyte, thereby destructing and killing the spore by blocking spore-induced phagocyte cell death, while increasing phagocyte activation level and production of antimicrobial and cytotoxic agents such as NO and inflammatory cytokines. The adherence of a spore to a phagocyte is increased after the surface thereof is coated with a glycoconjugate to form a glycoconjugate-coated spores. The glycoconjugate-coated spores also increase ingestion of the spores by phagocytes and facilitate phagosome-lysosome fusion, which in turn results in destruction and killing of bacterial spores via phagocytosis. The method enhances adherence, ingestion, destruction and killing of bacterial spores via phagocytes, which otherwise may be resistant to phagocytosis.

AN 2007:999460 CAPLUS <<LOGINID::20080229>>

DN 147:336297

TI Destruction of bacterial spores through glycoconjugate-enhanced phagocytosis

IN Tarasenko, Olga

PA USA

SO PCT Int. Appl., 88pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 2007100628	A2	20070907	WO 2007-US4664	20070222
	WO 2007100628	A9	20071108		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,			

MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,  
 RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,  
 TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRAI US 2006-775583P P 20060222

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

TI  $\beta$ -1-4-N-Acetylglucosamine polymers for modulation of vascular structure and/or function

AB The present invention relates to compns. comprising semi-crystalline  $\beta$ -1-4-N-acetylglucosamine polymers (p-GlcNac) and methods utilizing such polymers modulation of vascular structure and/or function. The compns. and methods disclosed are useful for stimulating, in a p-GlcNac concentration-dependent manner, endothelin-1 release, vasoconstriction, and/or reduction in blood flow out of a breached vessel, as well as for contributing to or effecting cessation of bleeding. The methods of the present invention comprise topical administration of materials comprising semi-crystalline p-GlcNac polymers that are free of proteins, and substantially free of single amino acids as well as other organic and inorg. contaminants, and whose constituent monosaccharide sugars are attached in a  $\beta$ -1-4 conformation.

AN 2002:123595 CAPLUS <<LOGINID::20080229>>

DN 136:172733

TI  $\beta$ -1-4-N-Acetylglucosamine polymers for modulation of vascular structure and/or function

IN Vournakis, John N.; Finkielstein, Sergio

PA Marine Polymer Technologies, Inc., USA

SO U.S. Pat. Appl. Publ., 71 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002019367	A1	20020214	US 2001-781182	20010212
	US 7041657	B2	20060509		
	CA 2437812	A1	20020822	CA 2002-2437812	20020208
	WO 2002063961	A1	20020822	WO 2002-US3792	20020208
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AU	2002306455	A1	20020828	AU 2002-306455	20020208
AU	2002306455	B2	20071213		
EP	1365651	A1	20031203	EP 2002-740104	20020208
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP	2004526705	T	20040902	JP 2002-563772	20020208
NZ	527872	A	20050729	NZ 2002-527872	20020208
US	2003078234	A1	20030424	US 2002-194740	20020712
US	7115588	B2	20061003		
MX	2003PA07176	A	20050214	MX 2003-PA7176	20030812

US 2007072826	A1	20070329	US 2006-542983	20061003
AU 2007251899	A1	20080124	AU 2007-251899	20071220
PRAI US 2001-781182	A	20010212		
AU 2002-306455	A3	20020208		
WO 2002-US3792	W	20020208		
US 2002-194740	A1	20020712		

RE.CNT 63      THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD  
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	8.42	153.38

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.60	-1.60

=> file registry

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
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FULL ESTIMATED COST	8.42	153.38

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.60	-1.60

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DICTIONARY FILE UPDATES: 28 FEB 2008 HIGHEST RN 1005771-38-9

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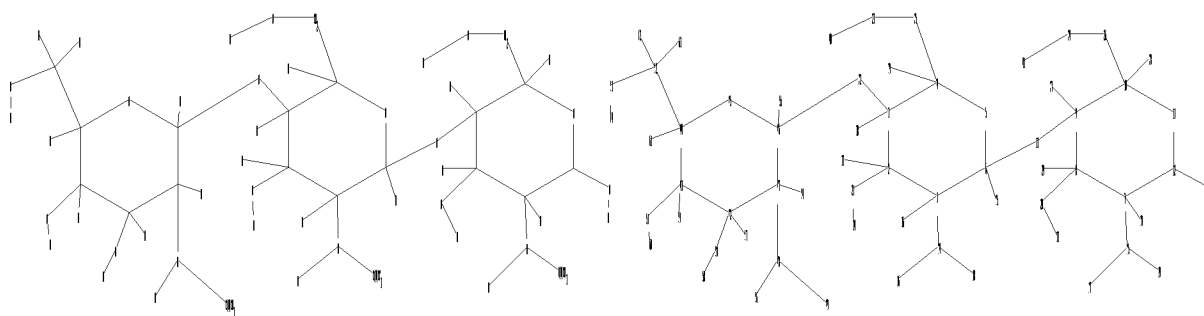
REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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61 62 63
64
ring nodes :
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9-13 9-27 10-26 10-28 12-31 14-16 14-18 15-17 15-19 20-33 21-34 22-46
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ring bonds :
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43-44
44-45 45-46 46-47
exact/norm bonds :
1-2 1-6 1-14 2-3 2-21 3-4 3-22 4-5 5-6 6-13 7-8 7-12 7-15 8-9 8-20
9-10 9-13 10-11 11-12 12-31 14-18 15-19 22-46 42-43 42-47 42-50 43-44
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46-47 47-48 48-49 52-53
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11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS
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39:CLASS 40:CLASS
41:CLASS 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 49:CLASS
50:CLASS 51:CLASS
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60:CLASS 61:CLASS
62:CLASS 63:CLASS 64:CLASS

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L13        STRUCTURE UPLOADED

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100.0% PROCESSED        437 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:    ONLINE    \*\*COMPLETE\*\*

                              BATCH    \*\*COMPLETE\*\*

PROJECTED ITERATIONS:        7486 TO        9994

PROJECTED ANSWERS:            0 TO            0

L14                0 SEA SSS SAM L13

=> s l13 fam full

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FULL SCREEN SEARCH COMPLETED -        1048 TO ITERATE

100.0% PROCESSED        1048 ITERATIONS

6 ANSWERS

SEARCH TIME: 00.00.01

L15                6 SEA FAM FUL L13

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L15    ANSWER 1 OF 6    REGISTRY    COPYRIGHT 2008 ACS on STN

RN    952753-72-9    REGISTRY

ED    Entered STN:    09 Nov 2007

CN     $\beta$ -D-Glucopyranose, O-2-(acetyl-2,2,2-d3-amino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetyl-2,2,2-d3-amino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-2-(acetyl-2,2,2-d3-amino)-2-deoxy- (CA INDEX NAME)

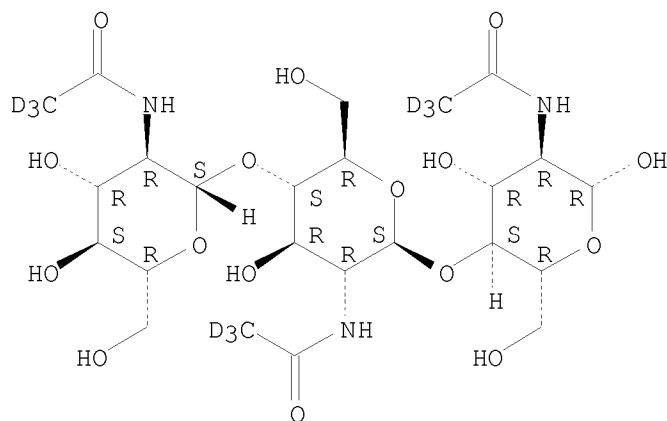
FS    STEREOSEARCH

MF    C24 H32 D9 N3 O16

SR    CA

LC    STN Files:    CA, CAPLUS

Absolute stereochemistry.

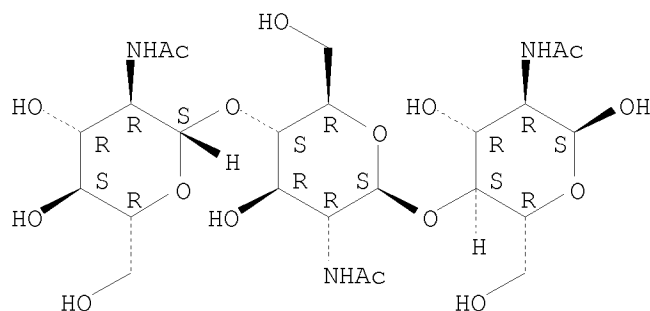


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L15 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 147695-57-6 REGISTRY  
ED Entered STN: 21 May 1993  
CN  $\alpha$ -D-Glucopyranose, O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-  
(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\beta$ -D-glucopyranosyl-  
(1 $\rightarrow$ 4)-2-(acetylamino)-2-deoxy- (CA INDEX NAME)  
FS STEREOSEARCH  
MF C24 H41 N3 O16  
SR CA  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)

Absolute stereochemistry.

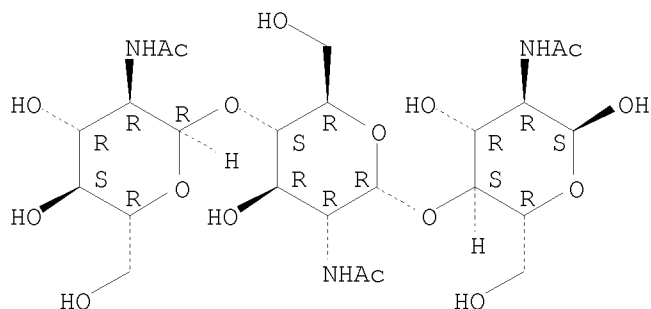


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L15 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 59990-26-0 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN  $\alpha$ -D-Glucopyranose, O-2-(acetylamino)-2-deoxy- $\alpha$ -D-  
glucopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetylamino)-2-deoxy- $\alpha$ -D-  
glucopyranosyl-(1 $\rightarrow$ 4)-2-(acetylamino)-2-deoxy- (CA INDEX NAME)  
FS STEREOSEARCH  
MF C24 H41 N3 O16  
LC STN Files: BEILSTEIN\*, CA, CAPLUS  
(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L15 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 50686-75-4 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN D-Glucopyranose, O-2-(acetyl-2-<sup>14</sup>C-amino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetyl-2-<sup>14</sup>C-amino)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-2-(acetyl-2-<sup>14</sup>C-amino)-2-deoxy- (9CI) (CA INDEX NAME)

OTHER NAMES:

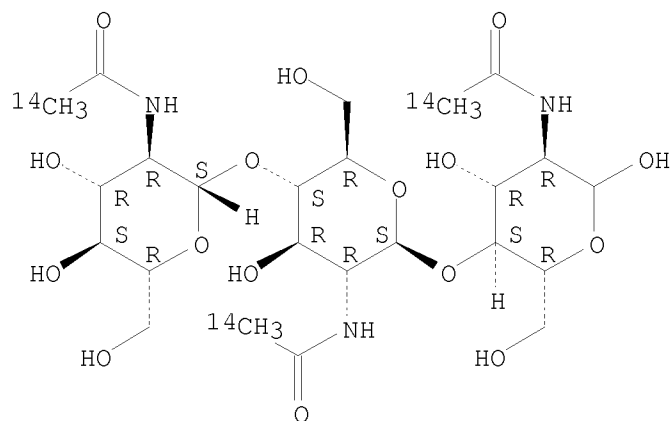
CN N,N',N''-Triacetyl[<sup>14</sup>C]chitotriose

FS STEREOSEARCH

MF C24 H41 N3 O16

LC STN Files: CA, CAPLUS

Absolute stereochemistry.



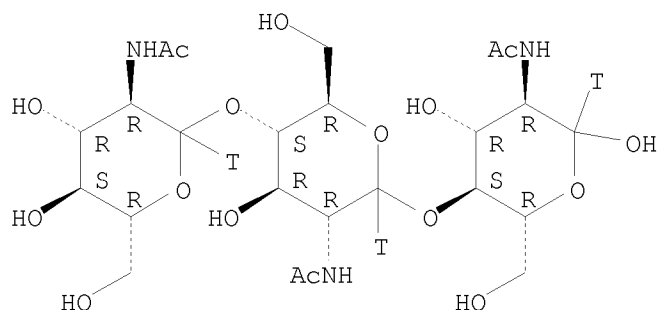
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L15 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN  
RN 50686-74-3 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN D-Glucopyranose-1-C-t, O-2-(acetilamino)-2-deoxy- $\beta$ -D-glucopyranosyl-1-C-t-(1 $\rightarrow$ 4)-O-2-(acetilamino)-2-deoxy- $\beta$ -D-glucopyranosyl-1-C-t-(1 $\rightarrow$ 4)-2-(acetilamino)-2-deoxy- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Chitotriose-1,1',1''-3H3  
 FS STEREOSEARCH  
 MF C24 H38 N3 O16 T3  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



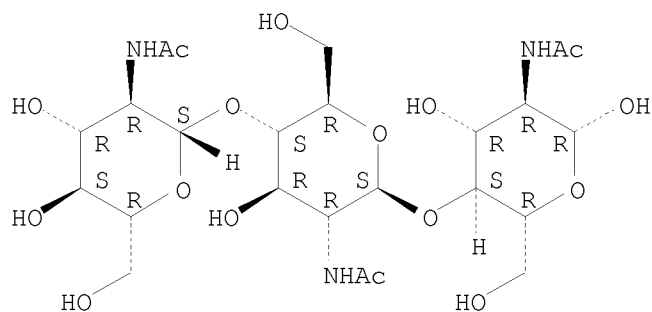
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L15 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2008 ACS on STN  
 RN 13319-32-9 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN  $\beta$ -D-Glucopyranose, O-2-(acetamido)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-2-(acetamido)-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-2-(acetamido)-2-deoxy- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glucopyranose, O-2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-2-acetamido-2-deoxy-,  $\beta$ -D- (8CI)  
 CN Glucopyranose, O-2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-O-2-acetamido-2-deoxy- $\beta$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-2-acetamido-2-deoxy- (7CI)  
 FS STEREOSEARCH  
 MF C24 H41 N3 O16  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, TOXCENTER  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

16 REFERENCES IN FILE CA (1907 TO DATE)  
16 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file caplus

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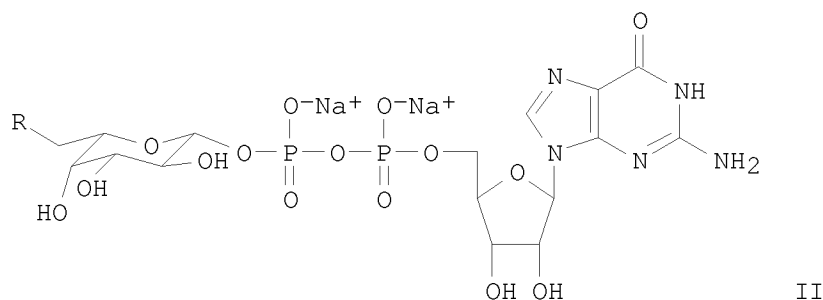
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(L15 (L) THU/RL)

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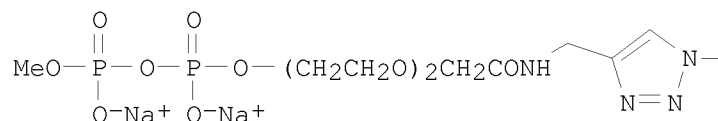
L17 19 L15

=> d l17 1-19 ti abs bib

L17 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN  
TI Preparation of nucleotide derivatives as glycosyltransferase inhibitors  
GI



Q=



AB An object of the invention is to provide various inhibitors of various glycosyltransferases. The object was achieved in the invention by focusing on the conformation change of the enzyme induced by the substrate and applying the correlation between the change and the catalytic activity to a design of a regulatory factor (such as an inhibitor) of an enzymic activity, more specifically, by providing a novel compound obtained by introducing a bulky group into a modified nucleotide or sugar via a triazole group, an oxime group, a hydrazone group or the like. The above novel compds. are represented by A-B-C (A = N3, COR, CHO; R = alkyl; B = sugar component; C = nucleotidyl, i.e. nucleoside mono-, di-, or triphosphate), e.g. (I; R1 = N3), which further undergo 1,3-dipolar cycloaddn. reaction (Click reaction) with acetylene compds. or condensation reactions with hydroxylamines or hydrazines to give X-Y-B-C (B, C = same as above; X = bulky group; Y = -ON:, NHN:, 1 or 1,2,3-triazole-1,4-diyl), e.g. I (R1 = Q). These A-B-C and X-Y-B-C compds. are inhibitors of glycosyltransferases such as fucosyl transferase, sialyl transferase, or galactosyl transferase and useful for treating or preventing disorders or diseases caused by abnormal activity of glycosyltransferases, e.g. cancer and cancer metastasis. Thus, 6-azido-2,3,4-tri-O-acetyl-6-deoxy-β-L-galactopyranose-1-phosphate was condensed with guanosine-5'-monophosphate morpholidate in the presence of 1H-tetrazole in pyridine for 2 days to give, after workup, purification by DEAE ion-exchange column chromatog., and passing through a column of Dowex 50X8 ion exchange resin, 11% guanosine-5'-diphosphate 6-azido-6-deoxy-β-L-galactopyranosyl ester (II; R = N3). II (R = N3) underwent Click reaction with MeOP(O)(ONa)OP(O)(ONa)OCH2CH2OCH2CH2OCH2CONHCH2C.tplbond.CH in the presence of CuSO4 in aqueous sodium ascorbate at room temperature for 12 h to give a triazole derivative II (R = Q). II (R = Q) inhibited fucosyl transferase with Ki of 19.6 μM.

AN 2007:788618 CAPLUS <<LOGINID::20080229>>

DN 147:189360

TI Preparation of nucleotide derivatives as glycosyltransferase inhibitors

IN Nishimura, Shin-Ichiro; Kondo, Hirosato

PA Hokkaido University, Japan; Shionogi & Co., Ltd.

SO PCT Int. Appl., 272pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007081031	A1	20070719	WO 2007-JP50534	20070116
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI	JP 2006-8039	A	20060116		
	JP 2006-225194	A	20060822		
OS	MARPAT 147:189360				
RE.CNT	9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L17 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Chemoenzymic synthesis of stable isotope labeled UDP-N-[2H]-acetyl-glucosamine and [2H]-acetyl-chitooligosaccharides

AB Labeled UDP-GlcNAc and chitooligosaccharides should be powerful tools for studies of N-acetylglucosaminyltransferase such as chitin synthases. We describe here a rapid, inexpensive and a common strategy for the chemoenzymic synthesis of uridine 5'-diphospho-N-[2H]-acetyl-glucosamine and the chemical preparation of N-[2H]-acetyl chitooligosaccharides (from 2 to 5 mers). Deuterated UDP-GlcNAc analog was tested as chitin synthase substrate and it exhibited an incorporation level in chitin as the natural substrate. Deuterium labeling of carbohydrates present different advantages: it is a stable isotope and allows glycosyltransferase mechanism studies by a mass spectrometry approach.

AN 2006:1293226 CAPLUS <<LOGINID::20080229>>

DN 147:486620

TI Chemoenzymic synthesis of stable isotope labeled UDP-N-[2H]-acetyl-glucosamine and [2H]-acetyl-chitooligosaccharides

AU Becker, Hubert F.; Thellend, Annie; Piffeteau, Annie; Vidal-Cros, Anne

CS Synthese, Structure et Fonction de Molecules Bioactives UMR7613, Universite Pierre et Marie Curie, Paris, 75252, Fr.

SO Glycoconjugate Journal (2006), 23(9), 687-692  
CODEN: GLJOEW; ISSN: 0282-0080

PB Springer

DT Journal

LA English

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Proteins isolated from lucerne roots by affinity chromatography with sugars analogous to Nod factor moieties

AB Nod factors are important elicitors in legume-bacterium symbiosis. Any candidate plant receptor(s) for these lipo-oligosaccharides can be expected to show some lectin-like properties. A novel protein (P60), a native tetramer with 60 kDa monomers, has been isolated from a membrane fraction of Medicago sativa (lucerne, alfalfa) roots by using affinity chromatog. with either GlcNAc or N,N',N"-triacyetyl-(1 → 4)-β-D-chitotriose [(GlcNAc)3] grafted to agarose beads as the matrix and, in a second step, Sephadex G-200 gel filtration. With



(GlcNAc)3-agarose an addnl. protein of 78 kDa was isolated. P60 showed hemagglutination activity with specificity for GalNAc, GalN, GlcNAc and GlcN. Binding expts. with radioactive GlcNAc gave a Kd of 95 nM and one binding site per monomer of P60; Nod factor competed strongly for this binding. In native PAGE, protein incubated with O-sulfated Nod factors had a higher electrophoretic mobility as a consequence of binding. However, the largest modification was observed with a natural mixture of Nod factors, containing the O-acetylated and O-sulfated tetrasaccharidic NodRm-IV(Ac,S) (in which Ac stands for an O-acetylated group at the non-reducing end and S for O-sulphation at the reducing end) in addition to the non-O-acetylated NodRm-IV(S) (which alone had little effect) and NodRm-V(S). The native PAGE study was also performed with known lectins from other sources, but only the 34 kDa lectin of *Phytolacca americana* (pokeweed) showed any such interaction, although without discrimination between Nod factors. Finally, one peptide of each isolated protein was sequenced; the peptide from P60 showed some similarity with dihydrolipoamide dehydrogenase and ferric legHb reductase, whereas the peptide from P78 was identical with an analogous region of 70 kDa heat shock protein.

AN 2000:97408 CAPLUS <<LOGINID::20080229>>

DN 132:234330

TI Proteins isolated from lucerne roots by affinity chromatography with sugars analogous to Nod factor moieties

AU Minic, Zoran; Leproust-Lecoester, Lydie; Laporte, Jean; De Kouchkovsky, Yaroslav; Brown, Spencer C.

CS Institut des Sciences Vegetales (CNRS-UPR40), Gif-sur-Yvette, F-91198, Fr.

SO Biochemical Journal (2000), 345(2), 255-262

CODEN: BIJOAK; ISSN: 0264-6021

PB Portland Press Ltd.

DT Journal

LA English

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Lectin-mediated bioadhesion: proteolytic stability and binding characteristics of wheat germ agglutinin and *Solanum tuberosum* lectin on Caco-2, HT-29, and human colonocytes

AB For the development of lectin-mediated drug delivery systems, the proteolytic stability of the nontoxic lectins from *Arachis hypogaea*, *Lens culinaris*, *Dolichus biflorus*, *Solanum tuberosum* (STL), and *Triticum vulgare* was investigated by in vitro exposure to gastrointestinal enzymes. No degradation products were observed within 24 h of incubation on SDS-polyacrylamide gels. Binding to human colon carcinoma cell lines was investigated by flow cytometry. The fluorescein-labeled derivs. of N-acetylglucosamine-specific wheat germ agglutinin (WGA) and STL exhibited the highest cell-associated fluorescence intensity. As determined by dilution expts., the number of WGA-binding sites on Caco-2, HT-29, and human colonocytes exceeded those for STL by 5-, 1.7-, and 1.4-fold, resp. By a competitive flow cytometric assay using N,N',N''-triacylchitotriose for inhibition, WGA affinity exceeded STL affinity by 10-fold. The affinity of each lectin to Caco-2, HT-29, and human colonocytes was about the same, indicating that similar lectin receptors were involved. Preventing N-glycosylation of the carcinoma cells by pretreatment with 0.001% tunicamycin for 40 h resulted in 30% inhibition of WGA and STL binding. When WGA was covalently attached to Sepharose beads (250-350 µm), the interaction with HT-29 and Caco-2 cells showed stable and tight binding. Therefore, especially considering the comparable affinity of human colonocytes and monolayer-forming Caco-2 and HT-29 cells, this system is proposed as a model for the development of lectin-mediated particulate pharmaceutical devices.

AN 1997:435068 CAPLUS <<LOGINID::20080229>>  
 DN 127:253093  
 TI Lectin-mediated bioadhesion: proteolytic stability and binding characteristics of wheat germ agglutinin and Solanum tuberosum lectin on Caco-2, HT-29, and human colonocytes  
 AU Gabor, Franz; Wirth, Michael; Jurkovich, Barbara; Haberl, Ines; Theyer, Gerhard; Walcher, Gerhard; Hamilton, Gerhard  
 CS Institute of Pharmaceutical Technology, The University of Vienna, Althanstrasse 14, Vienna, A-1090, Austria  
 SO Journal of Controlled Release (1997), 49(1), 27-37  
 CODEN: JCREEC; ISSN: 0168-3659  
 PB Elsevier  
 DT Journal  
 LA English  
 RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN  
 TI A proton NMR study of a fragment of partially N-deacetylated chitin produced by lysozyme degradation  
 AB The terminal unit of the N-deacetylated oligomer, which was prepared by lysozyme hydrolysis of chitin, was determined by <sup>1</sup>H NMR study.  
 AN 1993:255230 CAPLUS <<LOGINID::20080229>>  
 DN 118:255230  
 TI A proton NMR study of a fragment of partially N-deacetylated chitin produced by lysozyme degradation  
 AU Ishiguro, Kenichi; Yoshi, Naoko; Sakurai, Minoru; Inoue, Yoshio  
 CS Dep. Biomol. Eng., Tokyo Inst. Technol., Tokyo, 152, Japan  
 SO Carbohydrate Research (1992), 237, 333-8  
 CODEN: CRBRAT; ISSN: 0008-6215  
 DT Journal  
 LA English

L17 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN  
 TI Preparation of N-acetylglucosamine oligosaccharide from chitin  
 AB A simple method for small scale preparation of N-acetylglucosamine oligosaccharides from chitin was described. A HCl hydrolyzate of chitin was separated first on a column packed with granular active carbon to remove most of the monosaccharides and then the remaining component was subjected to separation by HPLC with LiChrosorb-NH<sub>2</sub> as stationary phase and MeCN-H<sub>2</sub>O as eluant. Mono-, di-, and tri-N-acetylglucosamine saccharides were obtained and characterized.  
 AN 1987:192242 CAPLUS <<LOGINID::20080229>>  
 DN 106:192242  
 TI Preparation of N-acetylglucosamine oligosaccharide from chitin  
 AU Shang, Heng; Tang, Jiajun; Huang, Kewu  
 CS Inst. Environ. Chem., Acad. Sin., Beijing, Peop. Rep. China  
 SO Shengwu Huaxue Yu Shengwu Wuli Xuebao (1986), 18(5), 453-4  
 CODEN: SHWPAU; ISSN: 0582-9879  
 DT Journal  
 LA Chinese

L17 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN  
 TI Subunit structure and interactions of the phloem proteins of Cucurbita maxima (pumpkin)  
 AB The 2 major proteins from the phloem exudate of C. maxima (pumpkin), PP1 and PP2, were stable in the absence of reducing agents after modification of their accessible cysteine residues with iodoacetamide. This permitted their purification without precautions to prevent oxidation. PP2, a lectin specific for oligomers of N-acetyl-L-glucosamine, was shown by sedimentation-equilibrium ultracentrifugation to be a dimer of mol. weight of

48,000. Neither dithiothreitol nor tri-(N-acetyl-D-glucosamine) altered this value. The constituent polypeptides were linked by 2 buried disulfide bridges. PP2 behaved aberrantly on gel-filtration on both Sephadex and Bio-Gel unless tri-(N-acetyl-D-glucosamine) was added to the elution buffer; the mol. weight was then measured as 46,000. Other proteins which bind oligomers of N-acetyl-D-glucosamine are also retarded on gel-filtration. Soluble phloem filaments were prepared by collection of exudate into deaerated buffer containing iodoacetamide but no reducing agent. Oxidative gellation of the filaments was prevented by rapid modification of their many accessible cysteine residues, and is assumed to have maintained the d.p. found in vivo. Those disulfide bridges which were present allowed the incorporation of .apprx.60% of the PP1 and 80% of the PP2 into polymeric material. Thus, PP1 and PP2 are both structural proteins present in the filaments observable in vivo. PP2 had an elongated binding-site for oligomers of N-acetyl-D-glucosamine. It is suggested that this lectin immobilizes bacteria and fungi to the cross-linked filaments which seal wounded phloem sieve-tubes, and thus maintains sterility.

AN 1983:520547 CAPLUS <<LOGINID::20080229>>

DN 99:120547

OREF 99:18551a,18554a

TI Subunit structure and interactions of the phloem proteins of Cucurbita maxima (pumpkin)

AU Read, Steve M.; Northcote, Don H.

CS Dep. Biochem., Univ. Cambridge, Cambridge, CB2 1QW, UK

SO European Journal of Biochemistry (1983), 134(3), 561-9

CODEN: EJBCAI; ISSN: 0014-2956

DT Journal

LA English

L17 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Separation and mutarotation of anomers of chitooligosaccharides

AB In a study on the lysozyme-catalyzed reaction of chitooligosaccharides, it was found that each chitooligosaccharide gave 2 completely separated peaks on high-performance liquid chromatog. with a partition column. Synthetic 2-acetamido-2-deoxy- $\beta$ -D-glucopyranose gave  $[\alpha]_{D14} = -18.1^\circ$  (c = 0.51, H<sub>2</sub>O) and a large 2nd peak with a minor 1st peak on high-performance liquid chromatog. When an aqueous solution of the  $\beta$ -anomer was allowed to stand, the area of the 1st peak on high-performance liquid chromatog. increased, together with a decrease in the area of the 2nd peak and an increase in  $[\alpha]_D$  value. The 2 peaks of each chitooligosaccharide on high-performance liquid chromatog. were thus due to the separation of  $\alpha$ - and  $\beta$ -anomers. The mutarotation of 2-acetamido-2-deoxy- $\beta$ -D-glucopyranose was followed by monitoring the  $[\alpha]_D$  value and the peak area of the 2 peaks on high-performance liquid chromatog. The ratios of  $\alpha$ - and  $\beta$ -anomers of chitooligosaccharides produced by the lysozyme-catalyzed reaction of chitopentaose were different from those of the corresponding authentic chitooligosaccharides which were allowed to stand in the absence of the enzyme under the conditions used for the enzymic reaction.

AN 1982:176790 CAPLUS <<LOGINID::20080229>>

DN 96:176790

OREF 96:29075a,29078a

TI Separation and mutarotation of anomers of chitooligosaccharides

AU Fukamizo, Tamo; Hayashi, Katsuya

CS Fac. Agric., Kyushu Univ., Fukuoka, 812, Japan

SO Journal of Biochemistry (Tokyo, Japan) (1982), 91(2), 619-26

CODEN: JOBIAO; ISSN: 0021-924X

DT Journal

LA English

L17 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI The effect of N-acylglucosamines on the biosynthesis and secretion of insulin in the rat

AB N-acylglucosamines stimulated insulin release from rat islets in vitro in the presence of substimulatory concns. of glucose, and the effect was abolished by mannoheptulose. Increasing the acyl-chain length from N-acetyl- to N-hexanoyl-D-glucosamine impaired the secretory response, but N-(dichloroacetyl)-D-glucosamine was a more potent stimulator of release than N-acetyl-D-glucosamine. N-acylglucosamines elicited insulin release in vivo; plasma insulin levels were increased maximum by N-(dichloroacetyl)glucosamine. N-acetylglucosamine stimulated proinsulin biosynthesis in the absence of glucose and the effect was not abolished by mannoheptulose.

AN 1976:403063 CAPLUS <<LOGINID::20080229>>

DN 85:3063

OREF 85:499a,502a

TI The effect of N-acylglucosamines on the biosynthesis and secretion of insulin in the rat

AU Ashcroft, Stephen J. H.; Crossley, Jeanette R.; Crossley, Peter C.

CS Med. Sch., Univ. Bristol, Bristol, UK

SO Biochemical Journal (1976), 154(3), 701-7

CODEN: BIJOAK; ISSN: 0264-6021

DT Journal

LA English

L17 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Mechanism for lysozyme-catalyzed hydrolysis

AB Secondary  $\alpha$ -3H kinetic isotope effects were utilized to probe the nature of the transition state in the lysozyme-catalyzed hydrolysis of chitotriose. A general synthesis of specifically labeled chitin oligomers (in particular chitotriose-1,1',1''-3H3, the substrate used in these studies) is described. Injection of Drosophila melanogaster larvae with labeled N-acetyl-D-glucosamine yields chitin, which can be hydrolyzed to give a range of chitin oligomers from chitobiose to chitoheptose. The value of  $kH/kT$  (the 3H isotope effect) obtained for the lysozyme-catalyzed hydrolysis of chitotriose was 1.19. This result indicates very considerable carbonium ion character in the transition state, and thus the mechanistic alternatives for lysozyme hydrolysis become distinguishable.

AN 1973:543848 CAPLUS <<LOGINID::20080229>>

DN 79:143848

OREF 79:23321a,23324a

TI Mechanism for lysozyme-catalyzed hydrolysis

AU Smith, L. E. H.; Mohr, L. H.; Raftery, M. A.

CS Church Lab. Chem. Biol., California Inst. Technol., Pasadena, CA, USA

SO Journal of the American Chemical Society (1973), 95(22), 7497-500

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

L17 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Circular dichroism of human lysozyme

AB Effects of pH and the various inhibitors on the CD spectrum of human urine lysozyme were studied and compared with those for hen egg-white lysozyme (EC 3.2.1.17). Human lysozyme gave tryptophyl CD maxima at 305 and 293.5 m $\mu$  with a neg. and pos. ellipticity, resp., at neutral pH values. On lowering the pH, the both CD maxima changed in a manner similar to that for the corresponding maxima at 305 and 295 m $\mu$  of hen egg-white lysozyme. This change was thus ascribed to the change in the interaction of Trp-108 and Glu-35. At alkaline pH values, as the tyrosyl residues were ionized, a conformation-dependent CD band with a large neg. ellipticity newly appeared at about 315 m $\mu$ . Since this wavelength was much longer

than that for the corresponding CD band (298 mμ) of hen egg-white lysozyme, this CD band reflects a special interaction between an ionized tyrosyl and other residues. Effects of di- and tri-N-acetylglucosamine on the CD band at 305 mμ were very similar to those for hen egg-white lysozyme. Both the equilibrium mixture of N-acetylglucosamine (NAG) and its β-methyl glycoside, however, gave no significant effect on the ellipticity at this wavelength; this fact differed from that for hen egg-white lysozyme. All the inhibitors studied also slightly enhanced another tryptophyl CD maximum at 293.5 mμ; this was a contrast to a large enhancement of the corresponding maximum at 295 mμ of hen egg-white lysozyme. All these inhibitors also reduced the neg. ellipticity at about 275 mμ. The extent of this reduction by di- and tri-NAG was greater than that for NAG and its β-methyl glycoside. The CD changes produced by tri-NAG at alkaline pH values were very similar to those for the binding at neutral pH values.

AN 1972:137494 CAPLUS <<LOGINID::20080229>>

DN 76:137494

OREF 76:22295a,22298a

TI Circular dichroism of human lysozyme

AU Ikeda, Kiyoshi; Hamaguchi, Kozo; Miwa, Shiro; Nishina, Toshihiro

CS Fac. Sci., Osaka Univ., Toyonaka, Japan

SO Journal of Biochemistry (Tokyo, Japan) (1972), 71(3), 371-8

CODEN: JOBIAO; ISSN: 0021-924X

DT Journal

LA English

L17 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Kinetics of lysozyme-substrate interactions

AB In the mechanism of the hydrolysis of linear polymers of

N-acetylglucosamine (I) by lysozyme (II), it was observed that H<sup>+</sup> uptake by

II at low substrate concentration is associated with binding to the 1st 3 of 6 sites

on the enzyme while H<sup>+</sup> is released upon subsequent binding to the bond-breaking site. Results of kinetic investigations on the binding of the trimer of I at pH 7.0 and of the dimer of I at pH 6.0 and 7.0 to the 1st sites of II are reported.

AN 1970:39264 CAPLUS <<LOGINID::20080229>>

DN 72:39264

OREF 72:7199a,7202a

TI Kinetics of lysozyme-substrate interactions

AU Holler, Eggehard; Rupley, John A.; Hess, George P.

CS Cornell Univ., Ithaca, NY, USA

SO Biochemical and Biophysical Research Communications (1969), 37(3), 423-9

CODEN: BBRCA9; ISSN: 0006-291X

DT Journal

LA English

L17 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Synthetic activity of hen egg protein lysozyme

AB Incubation of di-N-acetylchitobiose, tri-N-acetylchitotriose and

tetra-N-acetylchitotetraose in pH 3.5 phosphate buffer with lysozyme

yielded a precipitate of a chitinlike product. The reaction was facilitated by lengthening of the substrate chain.

AN 1964:405502 CAPLUS <<LOGINID::20080229>>

DN 61:5502

OREF 61:905b-c

TI Synthetic activity of hen egg protein lysozyme

AU Kravchenko, N. A.; Maksimov, V. I.

SO Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1964), (3), 584

CODEN: IASKA6; ISSN: 0002-3353

DT Journal

LA Unavailable

L17 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Enzymes from bovine placenta and seminal vesicles that oxidize D-(-)-1,2-propanediol and other polyols-their possible relation to fructose formation

AB Soluble proteins displaying D-(-)-1,2-propanediol: nicotinamide adenine dinucleotide phosphate oxidoreductase activity were purified 50- to 60-fold from bovine placental tissue and from bovine seminal vesicle, using chromatographic methods. The enzymes, which had similar chromatographic behavior, showed stereospecificity for the D-forms of the substrates tested. They catalyzed the following reversible reactions: D-1,2-propanediol .dblharw. D-lactaldehyde; glycerol .dblharw. D-glyceraldehyde; D-sorbitol .dblharw. D-glucose. Both enzymes were active over a wide pH range and were strongly inhibited by p-mercuribenzoate and by some heavy metals. The reaction kinetics did not follow the Michaelis-Menten equation when the aldehydes were used as substrates. The main physiol. function of these enzymes was to catalyze the transformation of D-glucose to D-sorbitol, an intermediate in D-fructose formation.

AN 1964:405501 CAPLUS <<LOGINID::20080229>>

DN 61:5501

OREF 61:904h,905a-b

TI Enzymes from bovine placenta and seminal vesicles that oxidize D-(-)-1,2-propanediol and other polyols-their possible relation to fructose formation

AU Velle, Weiert; Engel, Lewis L.

CS Norges Vet.-Hoegskole, Oslo, Norway

SO Endocrinology (1964), 74(3), 429-39

CODEN: ENDOAO; ISSN: 0013-7227

DT Journal

LA Unavailable

L17 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Alkaline degradation of amino sugars

AB Tri-N-acetylchitotriose (I) was degraded in 0.04N Ca(OH)<sub>2</sub> at 25° with the formation of D-isosaccharinic acid. I, di-N-acetylchitobiose and 2-acetamido-2-deoxy-D-glucose (II) were also detected in the reaction mixture Sodium hyaluronate was also degraded under the same conditions with the production of acids. Different reaction mechanisms were proposed for alkaline degradation of 4-O-substituted II and 3-O-substituted II.

AN 1962:423410 CAPLUS <<LOGINID::20080229>>

DN 57:23410

OREF 57:4745g-h

TI Alkaline degradation of amino sugars

AU BeMiller, J. N.; Whistler, Roy L.

CS Purdue Univ., Lafayette, IN

SO Journal of Organic Chemistry (1962), 27, 1161-4

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA Unavailable

L17 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Chitinase activity in cockroach and termite extracts

AB When chitin (I) has been partially altered, more rapid tests of chitinase (II) activity can sometimes be run, but for a rigorous demonstration of II an unaltered I was required (method of preparation from crab carapace given). It was demonstrated that unaltered I could be broken down by the blood, digestive juice, cuticle brei, extract of cast skins, and saliva of cockroaches. II was also demonstrated in an extract of whole termites (Coptotermes lacteus). The optimum pH for breakdown of unaltered I by

cockroach (*Periplaneta americana*) digestive II was 5.4-6.0. The products of I digestion were 75% of N-acetylglucosamine (III), a possible dimer and trimer of III, and a trace of glucosamine. Other forms of II from roaches produced only III and a trace of glucosamine. No acetylase activity was detected in the cockroach preps. Tests indicated that a given preparation of II liberated different amts. of III from different I preps. True native I consists of polymerized III in a complex with native protein but in common usage, the term "chitin" is applied to the polymerized III alone. Results are interpreted in relation to previous reports, with consideration of the different forms of II occurring in insects. 38 references.

AN 1962:418923 CAPLUS <<LOGINID::20080229>>

DN 57:18923

OREF 57:3879b-d

TI Chitinase activity in cockroach and termite extracts

AU Waterhouse, D. F.; Hackman, R. H.; McKellar, J. W.

CS Commonwealth Sci. Ind. Res. Organ., Canberra, Australia

SO Journal of Insect Physiology (1961), 6, 96-112

CODEN: JIPHAF; ISSN: 0022-1910

DT Journal

LA Unavailable

L17 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Some carbohydrases of the oyster

AB See CA 56, 13362g.

AN 1962:418922 CAPLUS <<LOGINID::20080229>>

DN 57:18922

OREF 57:3879a-b

TI Some carbohydrases of the oyster

AU Courtois, Jean Emile; Petek, Fahrettin; Dong, To

SO Bulletin de la Societe de Chimie Biologique (1962), 44, 11-21

CODEN: BSCIA3; ISSN: 0037-9042

DT Journal

LA Unavailable

L17 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of tri-N-acetylchitotriose-H3 and its hydrolysis by lysozyme

AB cf. CA 52, 15646a. Uniform radioactive labeling of this compound was obtained by incubating it with H3 gas according to the technique of Wilzbach (CA 51, 10359a), precipitating the product, and purifying it by paper chromatography. The product had a sp. activity of 56  $\mu$ c./mg. Lysozyme hydrolyzed the trisaccharide to di-N-acetylchitobiose and N-acetylglucosamine (I). Another unidentified cleavage product was observed which differed from glucosamine. The pH optimum of the reaction was 5. I inhibits the hydrolysis (50% at a concentration of 0.1 M), but glucosamine does not. Similarly, lysis of suspended *Micrococcus lysodeikticus* cells by lysozyme is inhibited by I but not by glucosamine.

AN 1962:68394 CAPLUS <<LOGINID::20080229>>

DN 56:68394

OREF 56:13243g-i

TI Preparation of tri-N-acetylchitotriose-H3 and its hydrolysis by lysozyme

AU Wenzel, Martin; Lenk, Hans Peter; Schuette, Ernst

CS Freie Univ., Berlin

SO Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie (1962), 327, 13-20

CODEN: HSZPAZ; ISSN: 0018-4888

DT Journal

LA Unavailable

L17 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN

TI Diphosphopyridine nucleotide-linked aldehyde dehydrogenase. I. Specificity and sigma-rho function

AB cf. CA 53, 8238i. Diphosphopyridine nucleotide-linked liver aldehyde dehydrogenase was prepared with twice the activity previously reported. The enzyme is difficult to prepare consistently at this level of purity and is relatively unstable when more highly purified. The pH optimum is shifted to higher values when lower concns. of aldehyde are used. A method is described for a more definite determination of Km values for aliphatic as well

as aromatic aldehydes. The enzyme catalyzes the oxidation of a variety of substituted benzaldehydes. The relative rates of oxidation of these aldehydes correlate with Hammett's sigma values to yield a diphasic curve with linear links. A similar type of plot was obtained previously in connection with nonenzymic reactions of substituted benzaldehydes. The results are discussed with reference to an interpretation of enzymic oxidation involving activation of the substrate through nucleophilic repulsion in a characteristic push-pull mechanism.

AN 1962:68393 CAPLUS <<LOGINID::20080229>>

DN 56:68393

OREF 56:13243e-g

TI Diphosphopyridine nucleotide-linked aldehyde dehydrogenase. I. Specificity and sigma-rho function

AU Deitrich, Richard A.; Hellerman, Leslie; Wein, John

CS Johns Hopkins Univ., Baltimore, MD

SO Journal of Biological Chemistry (1962), 237, 560-4

CODEN: JBCHA3; ISSN: 0021-9258

DT Journal

LA Unavailable

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	ENTRY	SESSION
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=> exp tri-N-acetylchitotriose/cn

```
E1      1      TRI-N-ACETYL-4,5-DIHYDRO-6''-DEOXYBROMOTOPSENTINE/CN
E2      1      TRI-N-ACETYL-D-GLUCOSAMINE/CN
E3      1  -->  TRI-N-ACETYLCHITOTRIOSE/CN
E4      1      TRI-N-ACETYLCRAMBESCINE A/CN
E5      1      TRI-N-ACETYLCRAMBINE A/CN
E6      1      TRI-N-ACETYLETHYLENEDIAMINE/CN
E7      1      TRI-N-AMYL PHOSPHATE/CN
E8      1      TRI-N-AMYLAMINE/CN
E9      1      TRI-N-AMYLPHOSPHINE OXIDE/CN
E10     1      TRI-N-BENZYL-1,3,5-TRIAZACYCLOHEXANE/CN
E11     1      TRI-N-BUTOXY-N-PROPYLSILANE/CN
E12     1      TRI-N-BUTOXYBORANE/CN
```

=> s e3

```
L18      1 TRI-N-ACETYLCHITOTRIOSE/CN
```

=> exp di-N-acetylchitobiose/cn

```
E1      1      DI-N-ACETYLCHITOBIASE PRECURSOR 385-AMINO ACID (DICTYOSTELIU
                M DISCOIDEUM STRAIN AX4 CHROMOSOME 2 MAP 1432191-1511958)/CN
E2      1      DI-N-ACETYLCHITOBIITOL/CN
E3      1  -->  DI-N-ACETYLCHITOBIOSE/CN
E4      1      DI-N-ACETYLCHITOBIOSYL POLY(L-ASPARAGINE)/CN
E5      1      DI-N-ACETYLDIHYDROEUDISTOMINE G/CN
E6      1      DI-N-ACETYLFORTAMINE B/CN
E7      1      DI-N-ACETYLGLUCOSAMINYLLACTOSE/CN
E8      1      DI-N-ACETYLNEURAMINOSYLLACTO-N-TETRAOSE/CN
E9      1      DI-N-ACETYLPRIANOSIN C O-ACETATE/CN
E10     1      DI-N-ACETYLPRIANOSIN D/CN
E11     1      DI-N-AMYL ADIPATE/CN
E12     1      DI-N-AMYL CHLOROPHOSPHATE/CN
```

=> s E3

```
L19      1 DI-N-ACETYLCHITOBIOSE/CN
```

=> cile caplus

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FULL ESTIMATED COST	10.76	304.14
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=> s (l18/thu) or (l19/thu)
      414 L18
      984144 THU/RL
      14 L18/THU
        (L18 (L) THU/RL)
      608 L19
      984144 THU/RL
      15 L19/THU
        (L19 (L) THU/RL)
L20      20 (L18/THU) OR (L19/THU)
```

```
=> d l20 1-20 ti abs bib
```

```
L20 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
TI Compositions for amelioration and/or prevention of dermatopathy containing
thioctic acid derivatives and/or chitin hydrolyzates
AB The invention relates to a composition for amelioration and/or prevention of
UV-induced dermatopathy, e.g. dermatitis, keratosis, hyperplasia, and
rough skin, wherein the composition is characterized by containing thioctic
acid derivative and/or chitin hydrolyzate as an active component. Preferably, the
thioctic acid derivative includes particles of thioctic acid, and/or reduced
form, optically racemic form, salts, ester, amide and/or cyclodextrin
inclusion compound of thioctic acid, which are coated with a lipid. The
chitin hydrolyzate may include N-acetylchitooligosaccharide and/or
N-acetylglucosamine. An oral composition, e.g. a food composition, containing
the composition is also disclosed. For example, hydrogenated rapeseed oil-coated
thioctic acid was mixed with other ingredients to obtain a capsule composition
AN 2007:640259 CAPLUS <<LOGINID::20080229>>
DN 147:39198
TI Compositions for amelioration and/or prevention of dermatopathy containing
thioctic acid derivatives and/or chitin hydrolyzates
IN Takashita, Takashi; Ishihara, Takeo
```

PA Bhn K. K., Japan  
SO Jpn. Kokai Tokkyo Koho, 18pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007145794	A	20070614	JP 2006-47436	20060128
PRAI	JP 2005-349921	A	20051106		

L20 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI A Multivariate Approach to Investigate Docking Parameters' Effects on Docking Performance

AB Increasingly powerful docking programs for analyzing and estimating the strength of protein-ligand interactions have been developed in recent decades, and they are now valuable tools in drug discovery. Software used to perform dockings relies on a number of parameters that affect various steps in the docking procedure. However, identifying the best choices of the settings for these parameters is often challenging. Therefore, the settings of the parameters are quite often left at their default values, even though scientists with long experience with a specific docking tool know that modifying certain parameters can improve the results. In the study presented here, the authors have used statistical exptl. design and subsequent regression based on root-mean-square deviation values using partial least-square projections to latent structures (PLS) to scrutinize the effects of different parameters on the docking performance of two software packages: FRED and GOLD. Protein-ligand complexes with a high level of ligand diversity were selected from the PDBbind database for the study, using principal component anal. based on 1D and 2D descriptors, and space-filling design. The PLS models showed quant. relationships between the docking parameters and the ability of the programs to reproduce the ligand crystallog. conformation. The PLS models also revealed which of the parameters and what parameter settings were important for the docking performance of the two programs. Furthermore, the variation in docking results obtained with specific parameter settings for different protein-ligand complexes in the diverse set examined indicates that there is great potential for optimizing the parameter settings for selected sets of proteins.

AN 2007:637483 CAPLUS <<LOGINID::20080229>>

DN 147:202915

TI A Multivariate Approach to Investigate Docking Parameters' Effects on Docking Performance

AU Andersson, C. David; Thysell, Elin; Lindstroem, Anton; Bylesjoe, Max; Raubacher, Florian; Linusson, Anna

CS Department of Chemistry, Ume University, Ume, SE-901 87, Swed.

SO Journal of Chemical Information and Modeling (2007), 47(4), 1673-1687  
CODEN: JCISD8; ISSN: 1549-9596

PB American Chemical Society

DT Journal

LA English

RE.CNT 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Glucosamine regulates differentiation of a chondrogenic cell line, ATDC5

AB Osteoarthritis (OA) is a slowly progressing chronic joint disease.

Glucosamine (GlcN) is a saccharide that is widely used to relieve symptoms associated with OA. However, the mechanism of the effects of GlcN on articular cartilage remains unclear. We studied the effects of GlcN and its analogs, including chitin derivs. included in health supplements

of containing GlcN, on a chondrogenic cell line, ATDC5. We examined the effects

these saccharides on the proliferation and differentiation of ATDC5 cells. Glucosamine analogs, such as N-acetyl glucosamine and chitobiose, did not affect the proliferation or differentiation of ATDC5 cells. While GlcN did not affect the proliferation of ATDC5 cells, it inhibited their differentiation. Next, we examined whether GlcN affects mineralization and glycosaminoglycan (GAG) production by ATDC5 cells. Mineralization was markedly inhibited by addition of GlcN to the cell culture medium. Moreover, GlcN induced the formation of sulfated GAG in ATDC5. We also analyzed the mRNA levels in ATDC5 cells. GlcN reduced the mRNA levels of Smad2, Smad4 and MGP. GlcN might inhibit expression of MGP mRNA and induce the production of chondroitin sulfate in ATDC5 cells. The mechanism by which GlcN inhibits mineralization may be by regulating the expression of mRNA for the Smad2 and Smad4 chondrogenic master genes.

AN 2007:480453 CAPLUS <<LOGINID::20080229>>

DN 147:110110

TI Glucosamine regulates differentiation of a chondrogenic cell line, ATDC5

AU Nakatani, Sachie; Mano, Hiroshi; Im, Ryanghyok; Shimizu, Jun; Wada, Masahiro

CS Department of Food Functional Science, Graduate School of Pharmacology, Josai University, 1-1 Keyakidai, Sakado, Saitama, 350-0248, Japan

SO Biological & Pharmaceutical Bulletin (2007), 30(3), 433-438  
CODEN: BPBLEO; ISSN: 0918-6158

PB Pharmaceutical Society of Japan

DT Journal

LA English

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Promoters for secretion of  $\alpha$ -1,4-N-acetylglucosamine-containing O-glycan-based sugar chain, and foods and remedies/preventives against Helicobacter pylori-related disease

AB The invention relates to an agent for promoting secretion of  $\alpha$ -1,4-N-acetylglucosamine-containing O-glycan-based sugar chain from cells, characterized by containing glucosamine and/or glucosamine derivative, R-GlcN or R-GlcNAc, (GlcN = glucosamine residue; GlcNAc = N-acetylglucosamine residue; R = H, sugar chain with polymerization degree of 1-5). Pharmaceutical and foods compns. containing the agent for treatment and/or prevention of Helicobacter pylori-related disease are also disclosed. For example, the effect of N-D-acetylglucosamine on prevention of secretion of  $\alpha$ -1,4-N-acetylglucosamine-containing O-glycan-based sugar chain was in vitro tested.

AN 2007:431982 CAPLUS <<LOGINID::20080229>>

DN 146:387188

TI Promoters for secretion of  $\alpha$ -1,4-N-acetylglucosamine-containing O-glycan-based sugar chain, and foods and remedies/preventives against Helicobacter pylori-related disease

IN Matahira, Yoshiharu; Misawa, Yoshitomo; Oya, Fumiyo

PA Yaizu Suisan Kagaku Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2007099668	A	20070419	JP 2005-290720	20051004
PRAI	JP 2005-290720		20051004		

L20 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI The antitumor activity of the hydrolysates of chitinous materials hydrolyzed by crude enzyme from *Bacillus amyloliquefaciens* V656

AB Chitin, colloidal chitin and water-soluble chitosan were hydrolyzed by crude enzyme solution produce by *Bacillus amyloliquefaciens* V656. The hydrolyzates with 12 h hydrolysis contained optimal (GlcNAc)<sub>6</sub> and showed higher antitumor activity. Among those chitinous materials, the most effective one was the hydrolyzates of water-soluble chitosan, which inhibited the growth of CT26 cells and reduced the survival rate to 34% in 1 day. Since the hydrolyzate of water-soluble chitosan contained the optimal hexamer/(GlcNAc)<sub>6</sub> at 12 h, it is conjectured that the antitumor activity should be related to (GlcNAc)<sub>6</sub>. This conjecture was further affirmed by experiment with pure (GlcNAc)<sub>6</sub>. However, This phenomenon might be due to the synergistic effect of the oligomers (GlcNAc)<sub>n</sub>, n = 1-6 in the hydrolyzates. The antitumor effect of the chitinous hydrolyzates is worth further investigation. The aim of this study was to investigate the induced apoptosis in CT26 cells by the hydrolyzates of chitinous materials. It was found that the hydrolyzates (A, B and C) inhibited the survival of CT26 cells in a concentration- and time-dependent manner. The hydrolyzates induced characteristic DNA fragmentation of the CT26 cells. These results suggested that the hydrolyzates from chitinous materials are potent apoptosis-inducing agents for CT26 cells.

AN 2007:315623 CAPLUS <<LOGINID::20080229>>

DN 147:8478

TI The antitumor activity of the hydrolysates of chitinous materials hydrolyzed by crude enzyme from *Bacillus amyloliquefaciens* V656

AU Liang, Tzu-Wen; Chen, Yu-Jen; Yen, Yue-Horng; Wang, San-Lang

CS Department of Bioindustry Technology, Da-Yeh University, Chanhwa, 515, Taiwan

SO Process Biochemistry (Amsterdam, Netherlands) (2007), 42(4), 527-534

CODEN: PBCHE5; ISSN: 1359-5113

PB Elsevier B.V.

DT Journal

LA English

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Pharmaceutical formulations for sustained delivery of polypeptides

AB The present invention provides pharmaceutical formulations comprising a solid ionic complex of a polypeptide having an isoelec. point lower than physiol. pH and an anionic carrier mol. The formulations of the invention are suitable as depot formulations for the sustained release of therapeutic polypeptides. Thus, to a bovine insulin solution in aqueous acetic acid (5.8 mg/mL, pH 3.9) was added a 0.5% aqueous solution of sodium

CM-cellulose

(CMC) to obtain a complex as a white precipitate The precipitate was isolated by

filtration, washed, centrifugated and dried. The powder obtained contained insulin 86.64%, CMC 7.50%, and water 1.50%. The solubility of the powder in a variety of media was determined For example, the solubility in water,

saline, 0.33 M NaCl solution and 5% acetic acid was 0.016 mg/mL, 0.052 mg/mL, 0.329 mg/mL, and 7.138 mg/mL, resp.

AN 2006:891099 CAPLUS <<LOGINID::20080229>>

DN 145:299534

TI Pharmaceutical formulations for sustained delivery of polypeptides

IN Musso, Gary F.; Barker, Nicholas; Wolfe, Janet L.; Ye, Ming

PA Praecis Phamaceuticals, Inc., USA

SO U.S. Pat. Appl. Publ., 11pp., Cont.-in-part of U.S. Ser. No. 205,292.  
CODEN: USXXCO

DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2006193825	A1	20060831	US 2005-265553	20051102
	US 2005112087	A1	20050526	US 2004-835717	20040429
	US 2006177417	A1	20060810	US 2005-205292	20050815
	WO 2007022239	A2	20070222	WO 2006-US31938	20060815
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI	US 2003-466388P	P	20030429		
	US 2004-835717	A2	20040429		
	US 2005-205292	A2	20050815		
	US 2005-265553	A	20051102		

L20 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Monocyte chemoattractant activity of galectin-3

AB Inhibitors of galectin-3 expression or activity, for administering to a subject in an amount sufficient to reduce or decrease onset, progression, severity, frequency, duration or probability of one or more symptoms associated with asthma, among other respiratory airway and respiratory mucosal disorders. Exemplary inhibitors of galectin-3 activity include galectin-3 sequences that retain carbohydrate-binding activity, galactose and its derivs. such as thio-galactoside glycoconjugates or derivs. that bind galectin-3, saccharides, glycodendrimers and N-acetyllactosamine derivs. The examples describe the monocyte chemoattractant activity of galectin-3.

AN 2006:657266 CAPLUS <<LOGINID::20080229>>

DN 145:117407

TI Monocyte chemoattractant activity of galectin-3

IN Liu, Fu-Tong; Sano, Hideki; Hsu, Daniel K.

PA USA

SO U.S. Pat. Appl. Publ., 58 pp., Cont.-in-part of U.S. Ser. No. 805,449.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2006148712	A1	20060706	US 2005-288966	20051128
	US 2002044932	A1	20020418	US 2001-805449	20010313
	US 7186681	B2	20070306		
PRAI	US 2000-188795P	P	20000313		
	US 2001-805449	A2	20010313		

L20 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI oligosaccharide derivatives for induction of yeast-form growth of dimorphic fungus

AB The invention relates to an agent for induction of yeast-form growth and inhibit mycelial-form growth of dimorphic fungus, especially Candida albicans,

for prevention of pathol. effect of the fungus, wherein the agent is characterized by containing chitosan oligosaccharide, chitosan oligosaccharide reduced product, chitin oligosaccharide, chitin oligosaccharide reduced product, glucuronic acid, glucosaminitol, lactosylamine, galactosyllactosylamine, and/or their salts.

AN 2006:564369 CAPLUS <<LOGINID::20080229>>

DN 145:40237

TI oligosaccharide derivatives for induction of yeast-form growth of dimorphic fungus

IN Matsumoto, Tatsuji; Mikami, Takeshi; Watabe, Toshihiko; Ogasawara, Ayako; Matahei, Yoshiharu; Misawa, Yoshitomo

PA Yaizu Suisan Kagaku Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2006151893	A	20060615	JP 2004-346462	20041130
PRAI	JP 2004-346462		20041130		

L20 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Diacetyl hexoses for enhancing biological functions in plant and animals

AB The present invention provides a composition which includes elicitor compds. selected from the group consisting of: (N,N'-diacetylhexobiose)n; (N,N'-diacetylhexobiose)n having one or more associated amino acid residues, wherein the amino acid residues are valine or ornithine; (N,N'-diacetylhexosamine)n having an associated (dihexobiose)n; (N,N'-diacetylhexosamine)n having an associated (dihexobiose)n and one or more associated amino acid residues, wherein the amino acid residues are valine or ornithine; or combinations thereof. The (N,N'-diacetylhexobiose)n and (N,N'-diacetylhexosamine)n comprise N-acetylglucosamine or other amino hexosamines, while the (N,N'-diacetylhexobiose)n and (dihexobiose)n are any D-hexoaldose or N-acetylamine derivative of D-hexoaldoses. In this aspect of the present invention, n=1 to 5 and the compds. are all 3 kDa or less. Also provided are a method for increasing the rate of fungal growth, a method for increasing extracellular fungal enzyme production, a method for increasing biol. control of plant and animal diseases, a method for increasing a method for increasing resistance of plants to diseases, and a method of alleviating pain and increasing resistance to, or recovery from, diseases in animals, using the composition of the present invention.

AN 2006:101554 CAPLUS <<LOGINID::20080229>>

DN 144:177496

TI Diacetyl hexoses for enhancing biological functions in plant and animals

IN Lorito, Matteo; Woo, Sheridan L.; Fogliano, Vincenzo; Mach, Robert L.

PA Italy

SO U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2006021470	A1	20060202	US 2005-128720	20050513
PRAI	US 2004-570765P	P	20040513		

L20 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Protective effects of mannan in Caco-2/TC7 cells treated with wheat-derived peptides

AB Celiac disease (CD) is characterized by a permanent intolerance to wheat gliadin and related proteins in genetically susceptible individuals. It is generally considered that CD is an immuno-mediated multifactorial disease, but a direct cytotoxic activity of gliadin-derived peptides (GL-PT) on intestinal mucosa cannot be excluded. Many efforts have been done to identify possible antagonists of this direct toxicity and several studies indicated that mannan and oligomers of N-acetylglucosamine, [N,N'-diacetylchitobiose (GLcNAc)2 and N,N',N'';-triacetylchitotriose (GLcNAc)3], could be very promising candidates. In the present study we investigated the ability of mannan, (GLcNAc)2 and (GLcNAc)3 to interfere with some toxic effects exerted by GL-PT, as cell growth and viability impairment, increased intestinal permeability and cellular inflammation, on a clone of the human intestinal Caco-2 cell line, Caco-2/TC7, expressing a more homogeneous population than the parental one. Our present results demonstrate that mannan, among the three mols. investigated, is the most suitable to counteract the adverse effects induced by GL-PT on Caco-2/TC7 cells, for all the parameters considered in this study.

AN 2005:1291121 CAPLUS <<LOGINID::20080229>>

DN 144:121722

TI Protective effects of mannan in Caco-2/TC7 cells treated with wheat-derived peptides

AU Vincentini, Olimpia; De Angelis, Isabella; Iannuccelli, Roberta; Silano, Marco; Stamatii, Annalaura; De Vincenzi, Massimo

CS Division of Human Health and Nutrition, Alimentary and Animal Health Department, Istituto Superiore di Sanita, Rome, 00161, Italy

SO Carbohydrate Polymers (2005), 62(4), 338-343

CODEN: CAPOD8; ISSN: 0144-8617

PB Elsevier B.V.

DT Journal

LA English

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI High throughput glycan microarrays for diagnosis and compositions of glycans for immunization and therapy

AB The invention provides arrays of glycans for detecting entities that bind to glycans. In some embodiments, the arrays can be used to detect disease, blood types, antibodies, bacterial or viral infection, cancer, and the like. The invention also provides methods and kits for such detection. In another embodiment, the invention provides methods of preventing or treating disease in a mammal by administering to the mammal a composition that includes at least glycan.

AN 2005:1027067 CAPLUS <<LOGINID::20080229>>

DN 143:321814

TI High throughput glycan microarrays for diagnosis and compositions of glycans for immunization and therapy

IN Blixt, Ola; Head, Steve

PA The Scripps Research Institute, USA

SO PCT Int. Appl., 228 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 2005088310	A2	20050922	WO 2005-US7370	20050307
	WO 2005088310	A3	20051124		
	WO 2005088310	A9	20061019		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				



CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1723422 A2 20061122 EP 2005-730370 20050307  
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR

JP 2007527539 T 20070927 JP 2007-502085 20050307  
 US 2007059769 A1 20070315 US 2006-516014 20060905

PRAI US 2004-550667P P 20040305  
 US 2004-558598P P 20040331  
 US 2004-629833P P 20041119  
 WO 2005-US7370 W 20050307

L20 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Binding and Uptake of Wheat Germ Agglutinin-Grafted PLGA-Nanospheres by Caco-2 Monolayers

AB The Caco-2 association of lectin-grafted PLGA-nanospheres was investigated compared to plain and BSA-coated spheres. Nanospheres made from fluorescent-labeled PLGA were coated with wheat germ agglutinin (WGA) or BSA and incubated with Caco-2 monolayers varying the concentration of nanospheres, the time, and the temperature. The tests were performed in a static

horizontal as well as an aerated vertical setup to find out the system most appropriate for estimation of bioadhesion. Due to bioadhesive effects, WGA-modified particles exhibited highest association to the cells as compared to plain and BSA-coated ones. The amount of associated spheres increased with time and concentration of the nanosphere suspension. Whereas the binding of lectin-coated spheres was independent from energy, their uptake was energy consuming as opposed to BSA and plain nanospheres, which exhibited nonspecific, energy independent binding and uptake. Although more particles were associated with the monolayer in the horizontal setup than in the vertical system, the vertical system reflects true bioadhesion due to circulation of the spheres which inhibits the influence of sedimentation. Immobilization of WGA considerably enhances the binding as well as the uptake of PLGA-nanospheres by Caco-2 monolayers. For bioadhesion studies, the vertical setup is recommended instead of the horizontal setup.

AN 2004:861945 CAPLUS <<LOGINID::20080229>>

DN 142:204394

TI Binding and Uptake of Wheat Germ Agglutinin-Grafted PLGA-Nanospheres by Caco-2 Monolayers

AU Weissenboeck, Andrea; Bogner, Elisabeth; Wirth, Michael; Gabor, Franz

CS Institute of Pharmaceutical Technology and Biopharmaceutics, University of Vienna, Vienna, Austria

SO Pharmaceutical Research (2004), 21(10), 1917-1923

CODEN: PHREEB; ISSN: 0724-8741

PB Springer Science+Business Media, Inc.

DT Journal

LA English

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI N,N',N"-triacetylglucosamine, an inhibitor of lysozyme, prevents myocardial depression in Escherichia coli sepsis in dogs

AB OBJECTIVE: Reversible myocardial depression in sepsis has been ascribed to the release of inflammatory mediators. We recently found that lysozyme c (Lzm-S), consistent with that originating from the spleen, was a mediator of myocardial depression in an Escherichia coli model of septic shock in dogs. We further showed in a right ventricular trabecular (RVT) preparation that Lzm-S's depressant activity could be blocked by N,N',N"-triacetylglucosamine (TAC), a competitive inhibitor of Lzm-S. We hypothesized that Lzm-S binds to or cleaves a cardiac membrane glycoprotein, thereby interfering with myocardial contraction in sepsis. In the present study, we examined whether TAC could prevent myocardial depression in an in vivo preparation and whether other related N-acetylglucosamine (NAG) structures could also inhibit Lzm-S's effect in RVT. DESIGN: Randomized exptl. study. SETTING: University laboratory SUBJECTS: Anesthetized, mech. ventilated dogs. INTERVENTIONS: We produced sepsis by infusion of E. coli over an approx. 6-h period. MEASUREMENTS AND MAIN RESULTS: We examined the effect of TAC on stroke work, our primary index of myocardial function, when treatment was administered before sepsis (pretreatment) and after 1.5 h (early treatment study) and 3.5 h of sepsis (late treatment study; LTS). In the pretreatment study and early treatment study, myocardial depression would have not yet occurred but would have already been present in the late treatment study. In RVT, we assessed the effect of other NAG oligosaccharides and variants to the NAG structure on Lzm-S's depressant activity. In pretreatment and the early treatment study, TAC prevented the reduction in stroke work observed in nontreated septic groups but did not reverse the reduction found in the late treatment study. In RVT, of the compds. tested, only N,N'-diacetylglucosamine showed an inhibitory effect. CONCLUSIONS: We found that TAC, a competitive inhibitor of Lzm-S, prevented myocardial depression in exptl. sepsis. Only specific NAG structures are inhibitory to Lzm-S's depressant activity. TAC may be useful in attenuating cardiovascular collapse in sepsis.

AN 2004:10964 CAPLUS <<LOGINID::20080229>>

DN 141:133790

TI N,N',N"-triacetylglucosamine, an inhibitor of lysozyme, prevents myocardial depression in Escherichia coli sepsis in dogs

AU Mink, Steven N.; Jacobs, Hans; Duke, Krika; Bose, Deepak; Cheng, Zhao-Qin; Light, R. Bruce

CS Departments of Pharmacology and Therapeutics, University of Manitoba, Winnipeg, MB, R3E 0Z3, Can.

SO Critical Care Medicine (2004), 32(1), 184-193  
CODEN: CCMDC7; ISSN: 0090-3493

PB Lippincott Williams & Wilkins

DT Journal

LA English

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Combination of amino sugars and cysteine or cysteine derivatives

AB The present invention relates to chemical complexes consisting of cysteine or derivs. of cysteine and an aminosugar as well as pharmaceutical compns. and dietary supplements comprising such complexes. The invention further relates to the use of such compns. or complexes for the preparation of a medicament or a dietary supplement in the suppression of hypersensitivity and inflammatory reactions such as rheumatic or dermatol. disorders or to a method of treating such diseases by administering such compns. and complexes. Capsules contain an example complex formed from N-acetylcysteine and glucosamine sulfate. A complex of N-acetylcysteine with glucosamine K sulfate salt had an anti-inflammatory effect in the carrageenin-induced paw edema test in rats.

AN 2003:22691 CAPLUS <<LOGINID::20080229>>

DN 138:78479  
TI Combination of amino sugars and cysteine or cysteine derivatives  
IN Weidner, Morten Sloth  
PA Astion A/S, Den.  
SO PCT Int. Appl., 54 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2003002125	A2	20030109	WO 2002-DK446	20020628
	WO 2003002125	A3	20031106		
	WO 2003002125	B1	20040521		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002319110	A1	20030303	AU 2002-319110	20020628
	US 2003162732	A1	20030828	US 2002-185982	20020628
PRAI	DK 2001-1038	A	20010629		
	DK 2001-1056	A	20010704		
	US 2001-303298P	P	20010705		
	WO 2002-DK446	W	20020628		

L20 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Chitin oligosaccharides and/or chitosan oligosaccharides for preventing or treating common cold or treating pain

AB A new method is presented which is useful in the prevention of the common cold (also called non-allergic rhinitis, viral upper respiratory tract infection, viral URI, etc. and for this presentation will be referred to as the "common cold") in mammals, including humans, and which also lessens the duration and intensity of the symptoms of the said condition should infection occur. Within the scope of the present invention is a method of treating pain in mammals, such as humans. The active ingredient in these methods can be a water soluble mixture available in oral form and selected from the chitin oligomers di N-acetyl chitobiose, tri N-acetyl chitotriose, tetra N-acetyl chitotetraose, penta N-acetyl chitopentaose, and hexa N-acetyl chitohexaose, with the water soluble oral chitosan oligomers selected from chitobiose, chitotriose, chitotetraose, chitopentaose, chitohexaose, and chitoheptaose.

AN 2002:143281 CAPLUS <<LOGINID::20080229>>

DN 136:194276

TI Chitin oligosaccharides and/or chitosan oligosaccharides for preventing or treating common cold or treating pain

IN Konno, Allen I.; Gauthier, Jay H.; Matahira, Yoshiharu

PA JDC (Hawaii) Inc., USA

SO U.S. Pat. Appl. Publ., 16 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2002022601	A1	20020221	US 2001-758210	20010112

US 6492350 B2 20021210  
PRAI US 2000-177572P P 20000127  
US 2000-177573P P 20000127

L20 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN  
TI Chitinous Materials Inhibit Nitric Oxide Production by Activated RAW 264.7 Macrophages  
AB Chitinous materials have been studied in wound healing and artificial skin substitutes for many years. Nitric oxide (NO) has been shown to contribute to cytotoxicity in cell proliferation during inflammation of wound healing. In this study, we examined the effect of chitin and its derivs. on NO production by activated RAW 264.7 macrophages. Chitin and chitosan showed a significantly inhibitory effect on NO production by the activated macrophages. Hexa-N-acetylchitohexaose and penta-N-acetylchitopentaose also inhibited NO production but with less potency. However, N-acetylchitotetraose, -triose, -biose, and monomer of chitin, N-acetylglucosamine and glucosamine had little effect on NO production by the activated cells. These results suggest that the promotive effect of chitinous material on wound healing be related, at least partly, to inhibit NO production by the activated macrophages. (c) 2000 Academic Press.  
AN 2000:262336 CAPLUS <<LOGINID::20080229>>  
DN 133:125208  
TI Chitinous Materials Inhibit Nitric Oxide Production by Activated RAW 264.7 Macrophages  
AU Hwang, Shiaw-Min; Chen, Chiung-Yun; Chen, Shan-Shan; Chen, Jian-Chyi  
CS Food Industry Research and Development Institute, Hsinchu, 30099, Taiwan  
SO Biochemical and Biophysical Research Communications (2000), 271(1), 229-233  
CODEN: BBRCA9; ISSN: 0006-291X  
PB Academic Press  
DT Journal  
LA English  
RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN  
TI Chitin oligosaccharides, chitosan oligosaccharides and/or their salts for treatment of liver disfunction  
AB Chitin oligosaccharides, chitosan oligosaccharides and/or their salts are claimed for treatment of liver disfunction. Thus, chitin oligosaccharides containing N-acetylglucosamine, N-acetylchitobiose, N-acetylchitotriose, N-acetylchitotetraose, N-acetylchitopentaose, N-acetylchitohexaose, and N-acetylchitoheptaose were prepared, and their liver protective actions were tested in animal models.  
AN 1998:696718 CAPLUS <<LOGINID::20080229>>  
DN 130:10654  
TI Chitin oligosaccharides, chitosan oligosaccharides and/or their salts for treatment of liver disfunction  
IN Fujiwara, Michio; Inada, Seisuke; Matahira, Yoshiharu  
PA Yaizu Suisan Kagaku Kogyo K. K., Japan  
SO Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 10287572	A	19981027	JP 1997-113346	19970415
	US 5981510	A	19991109	US 1998-60381	19980415
	US 6242431	B1	20010605	US 1999-353050	19990713
PRAI	JP 1997-113346	A	19970415		

JP 1997-199370           A       19970709  
US 1998-60381           A3      19980415

L20 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Modulated expression of glycoprotein oligosaccharides identifies

phenotypic differentiation in squamous carcinomas of the human cervix

AB This study has examined changes in expression of complex oligosaccharides during the development of invasive squamous carcinoma of the human cervix to determine whether particular oligosaccharide structures that might influence the phenotypic behavior of individual human cervical cancers were expressed during neoplasia. An extensive panel of lectins capable of identifying all the core and antennary oligosaccharide structures commonly encountered in human epithelia was chosen to probe a range of 11 benign and 26 malignant cervical tissues, all of the latter being clin. stage I. Lectin histochem. was performed both before and after tissue desialylation using the enzyme neuraminidase to identify masking of oligosaccharide determinants by sialic acid. Non-neoplastic cervical epithelial cells expressed only type I antennary structures (Gal $\beta$ 1 $\rightarrow$ 3GalNAc) usually modified by sialic acid linked 2 $\rightarrow$ 6 to terminal Gal- or GalNAc residues. Type II oligosaccharide structures (Gal $\beta$ 1 $\rightarrow$ 4GlcNAc-) were not identified in these normal tissues. No other terminal antennary modifications were detected on non-neoplastic cervical squamous epithelia. Conversely, neosynthesis of type II oligosaccharides was detected by Erythrina cristagalli (ECG) binding in 50% of the squamous carcinomas. Five terminal antennary modifications were commonly identified in the carcinomas that were not identified in normal cervical epithelia and comprised the oligosaccharides bound by lectins RCA, SBA, BS-1, LTA, and UEA-1. Synthesis of these oligosaccharides resulted in expression of structures similar to those recognized as ligands for extracellular matrix-binding proteins. Apparently, expression of such novel oligosaccharide structures may be an important promoter of local invasion and further dissemination of human cervical carcinomas through enhanced binding of malignant cells to stromal matrix proteins. This study has demonstrated that identification of expressed oligosaccharide structures is an objective method of identifying individual tumor cell phenotypes and may form the basis of a useful functional classification of human cervical squamous carcinomas.

AN 1995:832765 CAPLUS <<LOGINID::20080229>>

DN 123:336227

TI Modulated expression of glycoprotein oligosaccharides identifies phenotypic differentiation in squamous carcinomas of the human cervix

AU Banerjee, Soumitra; Robson, Peter; Soutter, W. Patrick; Foster, Christopher S.

CS Department of Pathology, Duncan Building, University of Liverpool, Liverpool, L69 3BX, UK

SO Human Pathology (1995), 26(9), 1005-13  
CODEN: HPCQA4; ISSN: 0046-8177

PB Saunders

DT Journal

LA English

L20 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Liposome having oligosaccharide on the surface

AB The invention is related to a liposome as an adjuvant which is effective for somatic immunization and reduced in toxicity and antigenicity and can be administered to humans. The liposome comprises 2-11 saccharide residues and has on its surface an oligosaccharide which can combine with a lectin originating in an antigen-presenting cell, and a vaccine is prepared by enclosing an antigen in the liposome.

AN 1995:733329 CAPLUS <<LOGINID::20080229>>

DN 123:123168

TI Liposome having oligosaccharide on the surface  
 IN Hatanaka, Masakazu; Mizuochi, Tsuguo; Sugimoto, Masanobu; Ohishi, Kazue  
 PA Tonen Corp., Japan  
 SO PCT Int. Appl., 31 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 9511704	A1	19950504	WO 1994-JP1828	19941028
	W: CA, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 07126185	A	19950516	JP 1993-272693	19931029
	JP 2828391	B2	19981125		
	CA 2152917	A1	19950504	CA 1994-2152917	19941028
	EP 677295	A1	19951018	EP 1994-931186	19941028
	EP 677295	B1	20050720		
	R: DE, FR, GB, IT				
	US 5759572	A	19980602	US 1995-481300	19950918
PRAI	JP 1993-272693	A	19931029		
	WO 1994-JP1828	W	19941028		

L20 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN

TI Chitin and chitosan oligomers as hypolipemics and formulations containing them

AB Hypolipemics containing chitosan/chitin oligomers were prepared A powder for oral administration containing chitohehexaose 20 and lactose 280 mg was prepared At 240 mg/kg (orally, in mice), chitotriose decreased the blood cholesterol level by 66.2%.

AN 1989:101787 CAPLUS <<LOGINID::20080229>>

DN 110:101787

TI Chitin and chitosan oligomers as hypolipemics and formulations containing them

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SO Jpn. Kokai Tokkyo Koho, 3 pp.

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LA Japanese

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	JP 06092308	B	19941116		
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